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H. J. Lynne
Cormack, William Epps

NARRATIVE

OF A

JOURNEY

ACROSS THE

Island of Newfoundland,

By W. E. CORMACK, Esq.,

The only one ever Performed by a European.
(1822)

ST. JOHN'S, N. F.

"MORNING CHRONICLE" PRINT.

1873.

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DEDICATION.

TO ROBERT JAMESON, Esq., *Regius Professor of Natural History, in the University of Edinburgh,*

DEAR SIR,

I take the liberty to address the following sketches of Newfoundland to you, in the hope that they will tend to throw some light upon the natural condition and geography, and add a little to our knowledge of that interesting and important island, in which you have, for the sake of science, evinced a stronger feeling of interest than any other public character, at home or abroad. They are a condensation of various personal observations made during a residence of some years in that country.

I have the honor to remain, dear sir,

With the highest esteem and respect,

Your very humble servant and late pupil,

W. E. CORMACK.

LONDON, May, 1836.

INTRODUCTORY.

Early in the Spring of 1822, being in Newfoundland—a far-famed country in which I felt a most lively interest—and free from professional engagement, I determined upon exploring the interior of the island, a region almost totally unknown, and concerning which and its inhabitants, the Red Indians, who were supposed to occupy the whole of it, the most besotted conjectures were entertained, particularly by the chief delegated public authorities, to which quarter one was inclined to look for some proofs of a feeling of interest for the condition of the country, through the means of which they obtained their bread.

PREFACE.

"CORMACK'S NARRATIVE OF A JOURNEY ACROSS NEWFOUNDLAND" has long been out of print, and very few copies are known to be in existence. Now that a greater interest in Newfoundland has been awakened in other countries, information regarding it is often sought for, more especially concerning the almost unknown interior of an island one sixth larger than Ireland. The Geological Survey, so ably conducted by Alexander Murray, Esq., F. G. S., has done much to add to our knowledge of Newfoundland, and will every year do more ; but as regards the vast interior, we know little as yet, beyond what has been told us by the intelligent and enterprising traveller, W. E. Cormack. His "Narrative," therefore, has a special interest and value ; so that its republication will be welcomed by many, and will help to draw attention to an island so long unknown or mis-known, but which recent researches prove to be rich in all those natural resources which, when developed, will secure for it a foremost place among the British Provinces of North America.

With regard to this reprint, I have to state that I carefully corrected the proof-sheets, with the aid of the original manuscript, now in the possession of Sir H. W. Hoyles, Chief Justice, by whom it was kindly lent me for this purpose. The former edition contained countless typographical errors, from which the present, I trust, is almost entirely free.

A very interesting and accurate sketch of the life of Cormack is added to this edition. It first appeared in *The British Columbian*, of May 9th, 1868, a newspaper published in New Westminster, British Columbia, and is apparently written by one who knew well the daring traveller who first explored the interior of Newfoundland. After a chequered career and a life of adventure, his dust reposes in New Westminster. His "Narrative" shows him to have been not only a man of wonderful courage and enterprise, but an accurate scientific observer, and, in all respects, an accomplished traveller.

The Report of the late Hon. Mr. Noad, at one time Surveyor General of this Colony, on the Western coast of Newfoundland, will be found appended to this reprint. It is possessed of much interest, but has been superseded by more recent accounts, among which may be mentioned Mr. Murray's Geological Reports, and an article in the *Maritime Monthly Magazine* for Feb., 1873, by myself.

M. HARVEY.

St. John's, May, 1874.

PART I.

TRAINING AND PREPARATION.

To accompany me in the performance, I engaged into my service, first, a Micmack Indian, a noted hunter from the south-west coast of the Island, and next a European, whom I thought fitted. For an undertaking involving so much uncertainty, hazard, and hardship, it was difficult to find men in every respect suited—of volunteers there were several.

1822

In the month of July I trained myself with my Indian, and tried his fidelity by making an excursion from St. John's to Placentia, and back by way of Trinity and Conception Bays, a circuit of about one hundred and fifty miles; I thereby also ascertained the necessary equipment for my intended expedition;* and discovered that it would be impossible to travel in the totally unknown interior, until subsistence could be there procured, the supply of which is extremely precarious until the berries are ripening, and the wild birds and beasts have left their birth-places to roam at large and are likely to fall in the traveller's way.

I now resolved to penetrate at once through the central part of the Island; and the direction in which the natural characteristics of the interior were likely to be most decidedly

*At Placentia there lived at this time —— Blackburne, Esq., an interesting old gentleman, a magistrate and patriarch of the place, a Scot by birth, who related with the greatest delight the event of the visit of His Royal Highness the Duke of Clarence (His present Majesty William the IV) at this place in the year 17 . . in His Majesty's ship.

In remembrance of His Royal Highness's visit, Her late Majesty Queen Caroline sent to Placentia the sum of four hundred pounds to build a chapel—accompanied with a model, and church service of plate, in trust, to Mr. Blackburne. The chapel was erected, and is now an extremely chaste building. The model was probably of one of the Royal Chapels in England.

exhibited, appeared to lie between Trinity Bay on the east coast and St. George's Bay on the west.*

In the latter end of August I equipped my two men with everything necessary for three months' campaign, and considered my party, under circumstances, sufficient.

August 29th.—It is necessary to mention that the chief Government authority was opposed to the project,—and with which he was made acquainted,—of obtaining a knowledge of the interior of the country. In consequence of this, I was deprived of the services of the European, who was, unfortunately for me, a Stipendiary by local appointment. I could not add to my party either by hiring or obtaining a volunteer.

PART II.

PASSAGE FROM ST. JOHN'S TO TRINITY BAY.

The proper season had arrived in which to set off, and I embarked at St. John's for Trinity Bay, previously taking with me my Indian only. Uncertainty of result waved over my determination, now more settled (by opposition) to perform at all hazards what I had set out upon. That no one would be injured by my annihilation was a cheering triumph at such a moment.

Mineralogy.—The sea coast at St. John's, and twelve or fifteen miles northward, as well as thirty miles to the southward, is formed of brown sandstone of a highly silicious quality approaching to quartz-rock, alternating with beds of conglomerate and brechea—the latter rocks consist of a mechanically formed basis of sandstone—in some parts amygdaloidal—with rolled agates, jasper, fragments of felspar, clay slate, &c., imbedded. The highest hills of this for-

* Captain Buchan's interesting narrative of his journey by the way of the river Exploits to the encampments of the Red Indians, and of his interview with these people on the banks of the Red Indian Lake in the interior, during the winter season, when the face of the country was covered with snows and ice, could not throw much light upon the natural condition of the country upon the banks of that river and lake.

mation are entirely, and both sides of the entrance of the harbor of St. John's are partly, formed of these. The sandstone is traversed in all directions by tortuous veins of quartz, generally white, and vertical, and it includes within it some minor beds of stratified sandstone, with a dip to the south east. The whole line of coast presents a precipitous and mural front to the sea, varying from a hundred to nearly five hundred feet in height. In many parts, the veins of quartz are of a green colour, indicative of copper, and which metal is here found in the form of gray copper ore of a very rich quality.

There was a copper mine opened about forty years ago, at Shoal Bay, fifteen miles south of St. John's, by a late Earl of Galloway, a Mr. Vauce Agnew of Galloway, and a Mr. Dunn of Aberdeen, the Collector at that time of H. M. Customs at St. John's. The mouths of two shafts, one in the side of the solid rock, the other on the acclivity fifty or sixty feet above the level of the sea, as well as other remains of the works, are still to be seen. It is said to have been worked two years; and the ore, sent to England, yielded 80 per cent. of copper. The richer veins took a direction under the level of the sea; and owing to the *reported* difficulty of keeping the mine dry, the undertaking was relinquished after an expenditure of £9,000. Cornish miners were brought purposely to the country. There are other parts of the coast adjacent, as well as inland, that exhibit the same proofs of abundance of copper as this close assemblage of veins—of six feet wide at Shoal Bay. 1782

From the termination of the sandstone northward of St. John's, the coast to Cape St. Francis is formed of gray quartz rock, gray wacke, felspar, porphyry, and a series of transition clay slate rocks—alternating in strata, the prevalent of the slate formation being green stone and flinty slate compact—long splintering, and friable, blue clay slate—with patches of red and green, gray quartz is the highest; and having sulphuret of iron disseminated in some spots—

oxidation gives it a brown colour externally. Chlorite and epidote enter more or less into the composition of all the hard rocks, inclusive of the quartz. The green stone passes into varieties ; some of which are of yellowish green colour, translucent at the edges, and seem to be composed of talc, approaching more or less to serpentine : these, and all the slate rocks, have a perfect double oblique seamed structure : the whole of them are in nearly vertical strata with an inclination to the north west. The line of junction of the slate formation with the sandstone runs N.N.E and S.S.W., and intersects the harbor of St. John's. The rocks are sometimes distinctly separated, sometimes pass gradually into each other, and again the slate rocks are extremely tortuous, with conforming veins of white quartz intermixed. In some low spots are beds of horizontally stratified blue and gray gritty slate, in tables or flags.

Cape St. Francis is formed principally of gray quartz rock and green stone. The hoary receding front manifests the thousands of years it has defied, and still defies more sternly than ever, the shocks and chafings of the hundreds of square miles of ice which are forced against it every winter by the constant current and north-west wind from the Arctic seas. The hills behind are from three to five hundred feet in height.

On the 30th August we sailed past Conception Bay, the most populous and important district in Newfoundland. It was in this Bay, according to history, that the first settlement of the *New-found-land* was attempted by the English in 1620—through Sir George Calvert (father of Lord Baltimore) who had obtained a grant from Charles I. of the south-east part of the island. Sir George pitched upon Porte-de-Grave, a harbor on the west side of the bay, as the spot best suited to his purpose, there being in its immediate vicinity an extensive tract of flat prairie land. It is said he was at great expense and pains to introduce European animals, plants, &c. He was lost at sea in returning to England, and

the scheme was abandoned. Some shrubs and small fruits grow here that have not been met with any where else on the Island, and were no doubt originally brought by Sir George. Mill-stones were until lately in existence at a spot where there had apparently been a mill; but it is supposed the mill was never finished.

On the promontory between Conception and Trinity Bays is the Point of Grates, and close to it Baccalooa Island.

The Point of Grates is the part of North America first discovered by Europeans. Sebastian Cabot landed here in 1496, and took possession of *The Newfoundland*, which he discovered in the name of his employer, Henry VII. of England. He recorded the event by cutting an inscription, still perfectly legible, on a large block of rock that stands on the shore.

Baccalooa Island, formed of a horizontally stratified rock, apparently gritty slate, is famous for the numbers of sea fowl that frequent it in the breeding season, principally the puffin, called on this coast the *Baccalooa bird*. The Island has one landing-place only, on its east side, and no resident inhabitants; but is visited by men in boats and small schooners called *Eggers*, who carry off cargoes of new laid eggs. The end of the profession of these men will be the extermination of the sea fowl of these parts for the sake of a cruelly-begotten temporary subsistence. The destruction by mechanical force of tens of thousands of eggs, after the commencement of incubation, precedes the gathering of a small cargo of fresh-laid eggs. Penguins, once numerous on this coast, may be considered as now extirpated, for none have been seen for many years past.

The wind having been unfavourable, it was not until the 31st August we arrived at Bonaventure, a small fishing harbor on the west side of Trinity Bay. It has a narrow entrance, and is surrounded by steep craggy hills of 400 to 600 feet in height.

None of the inhabitants here or in the vicinity, as at

other parts of Newfoundland, could give any information about the interior, never having been further from the salt water than in pursuit of animals for their furs, and for wood-stuff to build vessels and fishing boats.

From the summits of the hills immediately around the harbor, there is a view of the country in all directions inland for 20 to 30 miles, encompassing part of Random Island in the south-west. The whole is a continued succession of groups of rugged hills, (mountains except in height,) all apparently of a similar description to those on which we stood, with some small patches of black fir woods, and a few lakes interspersed. It presented a prospect of at least a week's hard labor overland, before we could reach what we could only hope might be the verge of the interior. This suggested to me the plan of going nearer to the centre of the Island by water, in order to save all our strength and resource for the main object of the undertaking, as it was impossible to know what difficulties and necessities we might have to contend with. This was to be effected by taking a boat from hence to the west part of Random Sound, which lay to the west-south-westward. The country we now saw was within the reach of any one to explore at any short interval of time, and was therefore of secondary moment to me.

The west side of Trinity Bay is composed of rocks of the transition clay slate formation, similar to those on the east. The hills, frequently of 400 to 600 feet in height, are chiefly of greenstone and hornblend slate, the out-goings of the nearly vertical strata and dykes, which sometimes present a perfectly mural front to the sea; blue clay slate alternates, and has cubical iron pyrites often imbedded, some of which are several inches in diameter. In the vallies are beds of horizontally stratified gritty slate of the tabular structure, similar to that noticed at other parts of the east coast. The tables or flags are often several yards in length, formed under a double oblique intersecting cleavage, and admirably adapted for many purposes of building. The beds are tra-

versed in all directions by dykes several feet in thickness, of a dark colored green stone, also of the seamed structure, the splinters of which are translucent at the edges.

The plants met with at this part of the north-east coast of America, although only $48^{\circ} 20'$ N. lat. or nearly in the parallel of Brest, and the highest hills not exceeding 600 feet, seem to be similar to those of Norway and Lapland in the north-west of Europe, under the Arctic circle. On the sea beaches the common plants are the sea plantain, *Plantago Maritima*, the sea pea, *Pisum Maritimum*, *Campanula rotundifolia*, *Elodea campanulata*, *Impatiens Virgata*, *Syrcepus Virginicus*, *Mentha Canadensis*, &c. The trees immediately at the coast, are nearly all of the pine tribe, principally firs. In the more sheltered spots a few birches are met with. On the acclivities are the raspberry, *Rubus Idaeus*, bramble, *R. fruticosus*, *Vivurnum*, *Pyrifolium*, bearing clusters of a wholesome blue berry—and *V. Cassinoides*; *Cornus Circinata*, bearing clusters of a white berry considered unwholesome, *C. Stricta* or red rod; strawberry; *Epilobium-Augustifolium*, *Etetragonum*, *E. Oliganthum*, *E. Lattifolium*; *Solidago Canadensis*, *S. flexicaulis*, *S. Viminea*; *Eupatorium purpureum*; *Prenanthis Serpentina*, everlasting *Antennaria*, *Margaritacea*; *Potentilla nersuta*; *Lysynachia Stricia*; *Seutillaria Galerifolia*; *Polygonum sagittatum*; *Micropetalum Gramineum* or *Stellaria Graminea*; *Cerastium viscosum*; *Thlaspi Brusa pastoris*; *Galium palustre*; white spinage; *Cheripodium alburn*; *Salicopus terhalut*; *Veronica Serpillifolia*, *Leontidou Taraxacum*; *Apargia Autumnalis* *Seucucelongatus*; *Souchis Oleraceus*; *Cnicus Arvensis*, &c. Several varieties of whortleberry, *Vaccinium tenellum* being the most common, Partridgeberry, *V. Vuxifolium*; Juniper, *Junipaus communis*. On the summits of the hills, *Empitrum nigrum*, on the black watery berry of which curlew and other birds feed; *Vaccinium uliginosum*; *Arbutus Uva Ursa*, *A. Unedo*; *Potentilla tridentata*, &c.

The inhabitants of Bonaventure, about a dozen families,

gain their livelihood by the cod fishery. They cultivate only a few potatoes, and some other vegetables, which were of excellent quality, amongst the scanty patches of soil around their doors; obtaining all their other provisions, clothing, and outfit for the fishery, from merchants in other parts of Trinity Bay, or elsewhere on the coast, not too far distant, giving in return the produce of the fishery, viz., cod fish and cod oil. They collectively catch about 1,500 quintals, or 200 tons of cod fish, valued at 12s. per quintal, £900; and manufacture from the livers of the cod fish about twenty-one tons of oil, valued at £16 per tun, £336; which is the annual amount of their trade. The merchants import articles for the use of the fisheries from Europe and elsewhere to supply such people as these, who are actually engaged in the operations of the fishery. The whole population of Newfoundland may be viewed as similarly circumstanced with those of Bonaventure.

September 3rd.—Having engaged a boat to carry us to the most inland part of Random Sound, we left Bonaventure. On the passage to the north-east entrance, about six miles south-west of Bonaventure, we witnessed the phenomenon of the very great transparency of the sea which it assumes here during the *time of change* of wind from West to East. The fishes and their haunts amongst the rocks and luxuriant weeds at the bottom were seen to a fearful depth. Every turn of the Sound presents a different aspect of rugged, and in some parts, grand scenery. Both sides are formed of steep and perpendicular hills of greenstone, and of rocks of the transition clay slate formation, of 500 to 600 feet in height, the nakedness of which displays, as at the outer parts of Trinity Bay, the skeleton of the earth. The strata are of various thickness, and lie in different directions. Patches of fir trees, *Pinus balsamea*, principally grow where the steepness does not prevent debris from lodging. The appearance of both sides of the Sound or gut correspond so remarkably, that it might be inferred Ran-

dom Island is a break off from the main island. There are no inhabitants here, but fishermen of the neighbouring parts come hither in spring for the rinds of the fir tree, *Pinus balsamea*, which they peel off, spread and dry in the sun, and afterwards use chiefly to cover the piles of cod fish to protect it from the wet weather and dew—in the process of curing. The North Arm of the Sound, that which we came through, is about thirty miles in length, and varies from one-eighth to one-third of a mile in width. Within two or three miles of its west extremity it expands and becomes shallow, and here the scene of gloom and barrenness is suddenly contrasted with a pretty, small sheet of water, surrounded by a flat thickly wooded country, as inviting as the past was forbidding.

Random Bar, at the west extremity of the Sound, caused by the meeting of the tide here, in the form of two considerable bores from the north and south arms, is dry except for an hour or two before and after high water, and there is then about two feet only of water upon it. It is in $48^{\circ} 13'$ north latitude, and $53^{\circ} 40'$ west longitude, (by Steel's chart, published in 1817).

The land adjacent to the bar is low, and the soil is good. Westward towards the interior it rises from the water's edge very gradually, and is entirely covered with wood. In consequence of black birch, *Betula lenta*, and white pine, *Pinus sylvestris*, having been produced in this part in considerable quantities fit for ship-building, it appears to have been formerly much resorted to, and vessels have been built there. A spot of ground near the bar had been appropriated to the interment of those who had died while employed in the vicinity. Most kinds of the pine tribe are met with here, viz., *Pinus nigra*, *P. alba*, *P. rubra*, *P. balsamea*, *P. microcarpa*, or *Larix*, and *P. sylvestris*, already noticed; also white birch, *Betula populifolia*, of the rinds of which the Indians cover their canoes; poplars, *Populus trepida* and *P. grandidentata*; maples, *Acer. rubrum* and

A. striatum, or mouse wood of Canada ; mountain ash, *Sorbus Americana* ; choke cherry, *Prunus Borealis*, and small wild cherry, *P. Pensylvanica* ; hazel, *Corylus Americana* ; elder, *Sambucus* ; and some other shrubs.

September 5th.—Our boat having lain dry on the bar nearly all night, we slept in her in preference to encamping in the woods. Wild geese and other birds were flying to and fro over us during the whole time, most industriously and fearlessly, in search of food. This is a favorite resort of ducks, herons, and other aquatic fowls.

Sunrise announced that adieu was to be taken for a time to the routine habits of civilization. My travelling equipments being landed, the boat with the party which brought my Indian left us on her return to Bonaventure. On her disappearance into the gloomy gut, and when the reports of our farewell guns were no longer echoed to each other along its windings, an abyss of difficulties instantly sprang up in the imagination between the point where we stood and the civilized world we had just quitted, as well as between us and the centre of the *Terra Incognita*. That we might be eaten up by packs of wolves was more than probable to the farewell forebodings of the inhabitants we had last seen, if we should escape the Red Indians. My Indian was also at this juncture sensibly affected ; contrasting no doubt the comforts and plenty he had of late experienced, to the toils and deprivations that were before us, the nature of which he could foresee. But we did not come here to entertain emotions from such a circumstance.

It would have been impossible, with the object I had in view, to reach this spot by land from St. John's, as the coast we passed is without roads or paths of any kind, and an entire assemblage of rocky mountains, forests and lakes, intersected by deep bays.

PART III.

DEPART FROM THE SEA COAST.

Being now removed with my Indian from all human communication and interference, we put our knapsacks and equipments in order and left this inland part of the seashore in a north direction, without regard to any track, through marshes and woods towards some rising land, in order to obtain a view of the country.* The centre of the island bore nearly west from us.

After several hours of hard labor, owing chiefly to the great weight of our knapsacks, we made only about two miles progress. From the tops of the highest trees the country in all directions westward for at least twenty miles appeared to be covered with one dense unbroken pine forest, with here and there a bold granitic pap projecting above the dark green surface. We had expected to see some open country nearer.

At sunset we halted, and bivouacked beneath the forest. As the weather was fine, and no prospect of rain, our camp consisted merely of a fire and a bundle of spruce boughs to lie on. My Indian, Joseph Sylvester by name, at midnight rolled himself up in his blanket, and evidently slept perfectly at home.

September 6th.—No clear ground appearing in our course, we struck directly westward through the forest. Wind-fallen

* *Equipment.*—My dress chiefly consisted of a grey moleskin shooting jacket, small clothes of worsted cord, three entire inside woollen body dresses, (no linen or cotton whatever,) worsted stockings and socks, Canadian long mockasin boots; the Indian wore leggings or gaiters made of swanskin blanketing, together with mockasins instead of boots. I was armed with a double-barrelled fowling piece and a brace of bayoneted-pistols, two pounds and a-half of gunpowder, and ten pounds of bullet and shot. The Indian had a single-barrelled fowling piece and a pistol, and the like quantity of powder and shot. Our stock consisted of a hatchet, two small tin kettles, for cooking; about twenty pounds of biscuit, eight pounds of pork, some portable soup, tea and sugar, pepper, salt, &c.; a blanket each, and one for the camp roof, a telescope, a pocket compass each: I took a small fishing rod and tackle, and various minor articles for our casual necessities and for mineralogical and other purposes of observation and notes. On another journey of the kind, I should very little vary this equipment.

trees, underwood, and brooks lay in our way ; which together with the suffocating heat in the woods, and moschetos, hindered us from advancing more than five miles to-day, in a W.N.W. direction.

September 7th, 8th, 9th were occupied in travelling westward through the forest, at the rate of seven or eight miles a day.

In our progress we ascended several of the insulated paps to view the country ; stunted firs and a thick rug of moss crept almost to their summits. The prospect of the ocean of indulating forest around, of the high land of Trinity and Bonavista Bays, and of the Atlantic Ocean in the distance northward, was splendid. There was an evident rise in the land westward from Random Bar.

These paps consist of pink and grey granite, very coarse grained. They lie northward and southward of each other, and seem to belong to a primitive range that exhibits itself at distant spots above the transition clay slate formation. They stand like imperishable monuments of the original construction of the earth, overlooking the less perfectly chrystalized rocks around them mouldering into soil. The granite often appears in the form of round-backed hills. On the crumbled surface of some of these that are not yet covered with vegetation, fragments of mica slate are sometimes mixed. On the surface of the vegetation with which others are covered, huge masses or boulders of very hard and sienitic granite often apparently lie,—but on examination are found to rest on their parent nukes underneath, as it were deserted by the more perishable portions of the original bed. Greenstone of a very perfect double oblique seamed structure, which owes its green color to an intimate association in various proportions with chlorite, alternates in the clay slate formation and appears next in elevation to the granite ; it presents plain weathered surfaces resembling yellow-grey sandstone, owing to the decomposition of its chief component part—felspar. The clay slate rocks are distinctly

seen at all the brooks and lakes within eighteen or twenty miles of the sea. Beyond that the primitive rocks prevail.

The *Forest*, it may be useless to repeat, is composed almost entirely of trees of the pine tribe, firs, in general fit for small spars, the black and red spruce, *pinus nigra* and *P. rubra* predominating. In some favored spots a few birches, larch, and *pinus Sylvestris*, attain a considerable size. Birch is the only deciduous timber tree met with in Newfoundland, there being here neither beech, maple, (except the two diminutive species already noticed,) oak, nor ash, all common on the neighbouring islands and continent.

Marshes and *lakes* lie hidden in the forest. Every marsh is accompanied almost invariably by a lake, and every hill also by a lake of proportional extent at its foot, and the three are frequently found together. We travelled on the rising ground in order to avoid the lakes.

On the skirts of the forest, and of the marshes are found the following trees and shrubs:—Poplar, *popula trepida*; Alder, *Alnus crispa*; Birches, *Betula nana* and *B. glandulosa*; Willow, *salix* —; Indian Pear, *Pyrus Botriatrium*, and *P. Arbutifolium*; wild gooseberry, *Ribes glaucum*; and wild currant, *R. prostratum*; Raspberries, *Rubus Occidentalis* and *R. Saxatilis*, *Potentilla fruticosa*; yellow-flowering honey suckle, *Lonicera Alpigena*?; *Rhodora Canadensis*; *Andromeda Calyciflora*, and *A. Augustifolia*; *Kalmia glauca*; Indian or Labrador tea, *Ledum latifolium myrica*, *gale*, *Roses*, *Rosa nitida*, and *R. franinifolia*, &c.

The marshes consist of what is termed marsh peat, formed chiefly of the mosses, *Sphagnum capillifolium* and *Vulgare S.* or *S. Glacile Mich*?; and are for the most part covered with grasses, rushes, &c., of which the following predominate: *Eleocharis Sanguinolenta*, the roots of which are thickly matted in bunches; cotton grasses, *Eriophorum Virginicum*, *E. Augustifolium*, and *E. lespitosium*; *Carex pansiflora*, *C. tenella*, *C. stipata* of Mecklenberg, *C. folliculata* and *C. bullata*; sweet scented grass, *Anthracanthum odoratum*, &c.

Some portions of the marshes retain more water than others, and here the prevalent plants are a variety of rushes; *Juncus Acutifloris* and *Effusus* and *Buforius* and *Campestris*, *Lugulalampestris*; *Pogoria Ophioglossoides*, red and a yellow kind; *Habernaria dilatata*, and *H. clavellata*; lark's spur, *Diosera rotundifolia*; Indian cup, *Sanacenia purpurea*; cranberry, *Oxycoccus macro-carpus*; and marsh berry, *O.* —; bog apple, *Rubus Chamamorus?*; ladies' slipper, *Cypripedium humile*; gold thread, *Coptis trifolia*; *Rynchospora alba*; *Stachys Aspera*; *Windsoria pore fornis*; *Arundo Canadensis*;—the two last grasses being five or six feet in height; *Mecklenbergia erecta* *Iris Virginica*; white violet, *Viola Selkirkia*, and blue, *V. Palustris*; *Lycopus Virginicus*, &c. Other spots of the marshes are raised above the common surface, owing generally to the projection of the underlying rocks, and consequently retain less moisture. Here the *Kalmia Augustifolia* sometimes occupies entire acres, and in the flowering season displays (as may be seen in the vicinity of St. John's) a very brilliant appearance. The *Rhododendron punctatum* Pursh, which puts forth its delicate lilac blossoms before its leaves, is also common. The pools and lakes shone brilliantly with white and yellow water-lillies—*Nymphaea odorata* and *N. Advena chelone obliqua*, &c. At and in the running waters are *pirea salifolia*, Columbine, *Thalictrum Cornuti* and *T. Pubescens*; *Lobelia Dortmamia*; *Egrusetum Syloaticum*; *Asta memorialis* and *A. Radula*; *Potamogeton natans*; *Hipparis vulgaris*; *Fontinalis squanosa*; *Ranunculus filiformis*, and *R. Secleratus*; *Atricularia Vulgaris*, *Spergula arvensis*; Buckbean, *Merganthes trifoliata*, *Onoclea sensibilis*; Dock, *Rumex*, several species; water-aven or chocolate root, *Geum Rivale*, &c.

Under the shade of the forest the soil is light, dry, very rocky, of a yellow-brown colour, and covered every where with a beautiful thick carpet of green moss, formed principally of *Polytrichum commune*. As there are few or no

deciduous or leaf-shedding trees, decay of foliage adds little or nothing to ameliorate or enrich the soil, and the velvet-like covering remains unsullied by fallen leaves. The surface is bespangled and the air perfumed by the *Merchantia polipicorpha*; *Trientalis Americana*, *Smilacina Borealis*; *S. Canadensis*, *bifolia*, and *S. trifolia*; *Linnea Borealis*; *Vaccinium hispidolum*, the white berry of which is convertible into a very delicious preserve; *Pyrola secunda*; *Cornus Canadensis*, bearing a cluster of wholesome red berries, sometimes called pigeon berries; *Malaxis unifolia*, *Habernari Clavellata*; *Biacuta bulbifera*, or *arnuts*; wild celery, *Lygusticum Scoticum*; *Streptopus Distortus*, bearing pendulous red berries under its large palmated leaves.

The plants enumerated are not limited to the situation described, but frequently range on several of them. There being neither browse, grass, nor berries in any quantity in the pine forest, even traces of any kind of game are seldom seen. Hence the necessity of carrying a stock of provisions to last while travelling through such woods, yet a heavy load prevents expedition and observing much of the natural condition of the country. The brooks are only visited by otters: the pools and small lakes by beavers and musk rats. The martin, *Mustela Martis*, is sometimes seen on the trees. Of the feathered tribe, the jay, *Corvus Canadensis*, and sometimes the titmouse followed us, chattering and fluttering, shewing that their retreats were never before invaded by man. A woodpecker, of which there are two or three kinds, is now and then heard tapping, and sometimes the distant croak of a raven catches the ear. These are the only interruptions to the dead silence that always and everywhere reigns during the day in such forests. Man alone forces his way fearlessly onward, scarce a sound being heard except he is directly or indirectly the cause. The loud notes of the loon, *Colymbus Arcticus* and *Colymbus glacialis*, discovered to us at night, as we lay in our camp, in what direction the lakes lay that were near, and we thus avoided

them, if in our course next day. The loon, like the other aquatic birds of passage, geese and ducks, is most alert in the night time, when the permanent inhabitants of the country are at rest. Almost every lake is occupied during the breeding season by a pair of these nocturnal clamorers. The wild, varied and significant responses to each other, as they swim about in search of food, sometimes like the bleating of sheep, and again like the lowing of cattle, keep the imagination awake all night.

It is impossible in an unknown country, and one into which for centuries admission was in a manner denied, to reconcile oneself with certainty as to who are fellow occupants around. Aborigines might have wandered from the more central parts of the island to our neighbourhood and espy our fire from a distance and steal upon us unawares. No civilized being had been here before, nor was any now expected. Apprehensions and thoughts of no ordinary kind occupy the mind unaccustomed to the untrodden boundless wilderness. Sleep is not looked for.

We had as yet shot only a few braces of grouse, *Tetraa*, *Albus*, while crossing the open rocky spots in the woods, and our stock of provisions was nearly consumed.

The heat in the woods was very oppressive, and there being no circulation of air under the trees, myriads of moschetos, with black and sand flies, annoyed us.

We lodged at nights under the thickest of the woods, encamping or bivouacking in the Indian manner. As the weather was fine, this was agreeable and cheerful. Familiarity with this transient system of sheltering, adopted from expediency, is soon acquired. It may be shortly described: Continuing our journey, about an hour before sunset a dry firm spot of ground on which to make a fire and to sleep under the thickest of the trees for shelter is pitched upon as near as possible to water, and an easy supply of wood for fuel. Care should be taken that the spot selected be not hollow underneath the moss that covers the ground, for in

that case the fire, which always consumes its own bed, may sink before the night so far below the surface as to be useless, and expose a cavity amongst blocks of granite into which the firebrands have fallen, and sufficient to swallow up any slumberer that might chance to slide into it. Arms and knapsacks are then piled; as much wood is cut and brought to the spot as will serve to keep up a good fire all night. Tinder is made by pulverizing a small piece of dry rotten wood and a little gunpowder together between the hands, and ignited by a spark from the lock of a pistol or fowling piece, or by any other means; the smoke of the fire affords instant relief from the constant devouring enemy, the flies. Boughs are broken from the surrounding spruce trees, two or three arms full to each person, to serve to lie and sleep on; they are laid on the ground at the windward side of the fire to be free from the smoke, tier upon tier, as feathers upon the back of a bird, the thick or broken ends placed in lines towards the fire, and form a kind of mat three or four inches in thickness. A few light poles are then cut and stuck in the ground along the windward side of the bed, inclined in an angle of about 45° over it towards the fire, on which to stretch a blanket to serve as a roof-screen in the event of rain during the night; the upper ends of the poles rest on a horizontal ridge pole, which is suspended at each end by a forked stick or a post. The camp being now ready for the general accommodation, wet clothes are taken off, and supper is prepared accordingly. The labor of exploring and hunting is such that the clothes are always wet from perspiration. A forked stick stuck in the ground is used for roasting by, and some pieces of rind of a birch or spruce tree serve for table cloth, platter, and torches. To make a camp after a day's hard fatigue requires about an hour, and the whole should be done before it is dark. Then and not till then is it proper to sit down to rest. After supper, each when disposed rolls himself up in his blanket and reposes on his fragrant bed of boughs, plac-

ing the soles of the feet near the fire. This precaution the Indian strictly adheres to, as a preservation of health, the feet being wet all day.

September 10th.—From the first we had now and then crossed over marshes and open rocky spots in the forest. As we advanced these latter became more frequent. The change of sylvan scenery as we passed from one to another was enlivening and interesting, and afforded the luxury of a breeze that freed us from the host of blood-thirsty flies.

Early in the day, the ground descending, we came unexpectedly to a rivulet about seventy yards wide, running rapidly over a rocky bed to the north-east, which we forded. The bed and shelving banks are formed of granite, mica and transition clay slate rocks. Some of the latter inclined to serpentine, greenstone, red sandstone of the coal formation, sand, and beds of fine yellow clay. The water was in some parts brought into a very narrow compass by the rocks projecting from the sides. Large birch and spruce trees overhung the banks, and rendered the scenery pretty. It abounded with fine trouts, some of which we caught. The sand was everywhere marked with tracks of deer. The roaring of a cataract of some magnitude was heard in the north-east. From the position and course of this stream, we inferred that it was a branch of the river which runs into Clode Sound, in Bonavista Bay; and my Indian supposed, from his recollections of the reports of the Indians concerning Clode Sound River, that canoes could be brought up from the sea coast to near where we were.

Leaving this rivulet, the land has a considerable rise for several miles. The features of the country then assume an air of expanse and importance different from heretofore. The trees become larger and stand apart; and we entered upon spacious tracks of rocky ground entirely clear of wood. Every thing indicated our approach to the verge of a country different from the past.

We soon found that we were on a great granitic ridge.

Barry Barry Hills

covered, not as the lower grounds are with crowded pines and green moss, but with scattered trees, and a variety of beautiful lichens or reindeer moss, partridge berries, *Vaccinium Bunifolium*, and whortleberries loaded the ground. The *Xytostem Villosum*, a pretty erect shrub, was in full fruit by the sides of the rocks; grouse, *Tetrao albus*, the indigenous game bird of the country, rose in coveys in every direction, and snipes from every marsh. The birds of passage, ducks and geese, were flying over us to and fro from their breeding places in the interior and the sea coast; tracks of deer, of wolves fearfully large, of bears, foxes, and martens, were seen everywhere.

On looking back towards the sea coast, the scene was magnificent. We discovered that under the cover of the forest we had been uniformly ascending ever since we left the salt water at Random Bar, and then soon arrived at the summit of what we saw to be a great mountain ridge that seems to serve as a barrier between the sea and the interior. The black dense forest through which we had pilgrimaged presented a novel picture, appearing spotted with bright yellow marshes and a few glossy lakes in its bosom, some of which we had passed close by without seeing them.

PART IV.

FIRST VIEW OF THE INTERIOR—OUR ADVANCE INTO IT—ITS DESCRIPTION—REACH THE CENTRAL PART OF THE ISLAND.

In the westward, to our inexpressible delight, the interior broke in sublimity before us. What a contrast did this present to the conjectures entertained of Newfoundland! The hitherto mysterious interior lay unfolded below us, a boundless scene, emerald surface, a vast basin. The eye strides again and again over a succession of northerly and southerly ranges of green plains, marbled with woods and lakes of every form and extent, a picture of all the luxurious scenes of national cultivation, receding into invisibleness. The imagination hovers in the distance, and clings involun-

tarily to the undulating horizon of vapour, far into the west, until it is lost. A new world seemed to invite us onward, or rather we claimed the dominion and were impatient to proceed to take possession. Fancy carried us swiftly across the Island. Obstacles of every kind were dispelled and despised. Primitiveness, omnipotence, and tranquility were stamped upon everything so forcibly, that the mind is hurled back thousands of years, and the man left denuded of the mental fabric which a knowledge of ages of human experience and of time may have reared within him. Could a dwelling be secured amid the heavenly emotions excited by the presence of such objects.

It was manifested on every hand that this was the season of the year when the earth here offers her stores of productions; land berries were ripening, game birds were fledging, and beasts were emerging to prey upon each other. Everything animate or inanimate seemed to be our own. We consumed unsparingly our remaining provisions, confident that henceforward, with our personal powers, which felt increased by the nature of the objects that presented themselves, aided by what now seemed by contrast the admirable power of our fire-arms, the destruction of one creature would afford us nourishment and vigour for the destruction of others. There was no will but ours. Thoughts of the aborigines did not alter our determination to meet them, as well as everything living, that might present itself in a country yet untrodden, and before unseen by civilized man. I now adopted, as well for self-preservation as for the sake of accomplishing the object of my excursion, the self-dependent mode of life of the Indian both in spirit and action.

But to look around before we advance. The great exterior features of the eastern portion of the main body of the island are seen from these commanding heights. Overland communication between the bays of the east, north and south coasts, it appears, might be easily established. The chief obstacles to overcome, as far as regards the mere way,

seem to lie in crossing the mountain belt of twenty or forty miles wide, on which we stood, in order to reach the open low interior. The nucleus of this belt is exhibited in the form of a semi-circular chain of insulated paps and round-backed granitic hills, generally lying north-east and south-west of each other in the rear of Bonavista, Trinity, Placentia, and Fortune Bays. To the southward of us, in the direction of Piper's Hole, in Placentia Bay, one of these conical hills, very conspicuous, I named Mount Clarence, in honor of His Royal Highness, who, when in the navy, had been in Placentia Bay. Our view extended more than forty miles in all directions. No high land, it has been already noticed, bounded the low interior in the west.

September 11th—We descended into the bosom of the interior.

The plains which shone so brilliantly are steppes or savannas, composed of fine black compact peat mould, formed by the growth and decay of mosses, principally the *Sphagnum Capillifilium*, and covered uniformly with their wiry grass, the *Uphrasia Officinalis* being in some places intermixed. They are in the form of extensive gently undulating beds, stretching northward and southward, with running waters and lakes, skirted with woods, lying between them. Their yellow green surfaces are sometimes uninterrupted by either tree, shrub, rocks, or any inequality, for more than ten miles. They are chequered every where upon the surface by deep beaten deer paths, and are in reality magnificent natural deer parks, adorned by woods and water. The trees here sometimes grow to a considerable size, particularly the larch; birch is also common. The deer herd upon them to graze. It is impossible to describe the grandeur and richness of the scenery, and which will probably remain long undefaced by the hand of man. In vain were associations; in vain did the eye wander for the cattle, the cottage, and the flocks.

Our progress over the savanna country was attended with

great labor, and consequently slow, being only at the rate of five to seven miles a day to the westward, while the distance walked was equivalent to three or four times as much. Always inclining our course to the westward, we traversed in every direction, partly from choice, in order to view and examine the country, and partly from the necessity to get round the extremities of lakes and woods, and to look for game for subsistence.

It was impossible to ascertain the depths of these savannas, but judging from the great expanse of the undulations, and the total absence of inequalities on the surfaces, it must often be many fathoms. Portions of some of the marshes, from some cause under the surface, are broken up and sunk below the level, forming gullies and pools. The peat is there exposed sometimes to a depth of ten feet and more without any rock or soil underneath; and the process of its formation is distinctly exhibited from the dying and dead roots of the green surface moss descending linearly into gradual decay, until perfected into a fine black compact peat, in which the original organic structure of the parent is lost. The savanna peat immediately under the roots of the grass on the surface is very similar to the perfected peat of the marshes. The savannas are continually moist or wet on the surface, even in the middle of summer, but hard underneath. Roots of trees, apparently where they grew, are to be found by digging the surfaces of some of them, and probably of all. From what was seen of their edges at the water courses they lie on the solid rock, without the intervention of any soil. The rocks exhibited were transition clay slate, mica slate, and granitic.

One of the most striking features of the interior are the innumerable deer paths on the savannas. They are narrow and take directions as various as the winds, giving the whole country a checquered appearance. Of the millions of acres here, there is no one spot exceeding a few superficial yards that is not bounded on all sides by deer paths.

We however met some small herd only of these animals, the savannas and plains being in the summer season deserted by them for the mountains in the west part of the island. The Newfoundland deer, and there is only one species in the island, is a variety of the reindeer, *Cervus Tarundus*, or Carriboo; and, like that animal in every other country, it is migratory, always changing place with the seasons for sake of its favorite kinds of food. Although they migrate in herds, they travel in files, with their heads in some degree to windward, in order that they may, by the scent, discover their enemies the wolves; their senses of smelling and hearing are very acute, but they do not trust much to their sight. This is the reason of their paths taking so many directions in straight lines; they become in consequence an easy prey to the hunter by stratagem. The paths tend from park to park through the intervening woods, in lines as established and deep beaten as cattle paths on an old grazing farm.

The beaver, *Castor Fiber*.—Owing to the presence of the birch tree, *Betula nigra*, all the brooks and lakes in the basin of the interior have been formerly and many are still inhabited by beavers, but these have in many places been destroyed by Indians. The bark of the birch tree, together with that of a dwarf willow which abounds at the edges of the waters, is the favorite food of the beavers. They also subsist on the large roots of the white waterlily, *Nymphaea odorata*, called by the Indians beaver-root, which they detach in pieces from amongst the mud at the bottom of the lakes and pools. They sometimes, although seldom here, eat of the bark of the spruce fir, *Pinus Balsamea*. They obtain the bark from the trees by gnawing the trunks through about two feet above the ground, and thus causing them to fall. The side on which a tree is intended to fall is cut two-thirds through, the other side one-third. Sometimes, as happens with the most experienced wood-cutter, a tree slips off the stem and will not fall to the ground owing to

the support from the branches of adjacent trees. The work has then to be performed over again above the first cutting, as we saw had happened with the beavers in several instances. Some of the trees thus brought to the ground were fifteen inches and upwards in diameter. The tree being felled, every branch by additional gnawing becomes accessible, and by sub-dividing, portable.

The sagacity displayed by the beavers in constructing their houses has been often described; but it is in their damming operations that their *reason* is evinced. They frequently dam up such brooks as have birch trees growing plentifully along their margin and build their houses—with one always immersed or dipt into the margin of the lake thus formed. They also, by damming, raise the level of natural lakes, to accommodate the surface to some eligible site near the margin, or on an island or rock, chosen to build their house upon. On first witnessing the extent of work performed on some of these dams, it is difficult to persuade oneself that it has not been done by man. The materials used are trunks of trees—gnawed down by the beavers themselves for the purpose—mud, sticks, stones, and swards. Their houses are formed of the same materials and resemble in their exterior a hemispherical mud-hovel, of from eight to ten feet in length, such as human beings, in some parts, dwell in, but without a visible door or aperture for the escape of smoke. They have different abodes for summer and winter, occupying the former for four or five months, and the latter seven or eight months of the year, according to the temperature of the seasons. Those are sometimes several miles apart. A winter house differs from a summer one, principally in being larger and more substantial. The chief entrance of both is under the surface of the water in the lake; that of the summer house about two feet, that of the winter about three feet. A house has often another entrance at the back or land side if the ground will permit, also under water for egress and ingress to and from the adjoining woods. If the

entrance of the winter house was placed nearer to the surface than is stated, it might be frozen up from the outside during the severity of the winter, and a stop put to the egress and ingress into and out of the lake. In summer the beavers can travel up and down the brooks, swim round the lake, go into the woods in search of food, and return to their houses to rest. In winter the whole surface of the country, land and water, being sealed under snow and ice, instinct directs these animals to concentrate at one accessible spot underneath a stock of provisions to subsist on during that season. It is easier for them to build a house close to where a winter stock of food is to be procured, than to carry this to the house occupied in summer, around which much of the food has probably been consumed. A family, which consists generally of two old, and two, three or four young, will commence early in September to build a house for the winter, and soon afterwards to collect a stock of provisions. They fell tree after tree in the manner described as near as possible to the winter house, gnaw the branches into portable pieces, carry them one by one to the margin of the lake, swim with them to near the front entrance, then dive and deposit them at the bottom; if the piece is inclined to float they stick one end in the mud and even lay stones upon it. In October or November, by the time the lakes are frozen over, and snow covers the ground, the house is completed and the winter's stock of birch wood, with the bark on, placed around the entrance. Now in retirement, they dive through to the bottom of the lake, and bring up at pleasure to within the house a piece to eat of the bark; when stript they carry it out and bring in another. Thus is the winter spent. At the termination of it, when the ice disappears, the hundreds of pieces of wood, that seven months before were covered with bark, are now to be seen deposited on the dam spot entirely peeled. The senses of hearing and smell, especially of the former, of the beaver, are exquisitely fine. It requires the utmost precaution and

vigilance of the hunter to steal within shot of them without detection, and this must be always done from the leeward. Their sense of sight is weak, and they seldom appear abroad during the day. On account of the value of its skin the beavers are the chief object of chase with the Indians. These people having made themselves acquainted with the different spots throughout the Island where these valuable animals abound most, hunt over these places alternately and periodically, allowing the beavers three years to regenerate. We shot many of them for provision.

Geese, *Anas Cannadensis*, and Ducks (the black duck) *Anas Boschas*, are met with in great numbers in the interior, the ducks in particular in the central parts of the island. There, remote from man, they breed undisturbed on the edges and islands of the ponds and lakes. The geese moult soon after their arrival in the spring; and, owing to the loss of their pinion feathers, are unable to fly during the summer or breeding seasons; but they can then run faster than a man on the marshes, and if surprised at, or near a pond, they will plunge in and remain under water with their bills only above the surface to permit of breathing, until the enemy has passed by. They feed on berries, preferring that of the *Empetum Nigrum*, and the seeds of grasses. Both the old and young become enabled to fly in September; and as soon after that as the frost affects the berries and causes the seeds of the grasses on the marshes and savannas to fall to the earth, or otherwise when the snow falls and covers the ground, they collect in flocks, and fly off to the southern shores of the island and from thence to the Gulf of St. Lawrence. They remain there until December, and then, assembled, take flight in immense flocks to the southern parts of America, to return in the spring. The ducks do not quit the interior for the sea coast so early as the geese—that is, not until the pools and ponds in which they obtain their food are frozen over, and they are the last of the birds

of passage seen here. Loons of two species breed in the interior, almost every lake, as observed nearer to the sea coast, being occupied during the summer season by a pair of them. Likewise the common sea-gull, early in the spring, which fly off to the sea in July and August. Curlews breed on the barren hills; snipes, (jack,) a kind of godwit (called yellow legs), and bitterns on the marshes; but the first had now all gone to the sea-coast. The redbreasted thrush, *Turdus Migratories*, breed in the scanty woods, near to where berries abound; they fly off in flocks to the coast in September, and from thence to the more southern countries. There are several species of hawks and owls here; of the former genus, one species was very small.

The rivers and lakes abound with trouts of three or four kinds, differing in size and colour. In one of the source branches of Gander River, which we crossed, we caught some small fish, apparently salmon fry. A species of fish larger than the trout is said by the Indians to be found in several of the large lakes.

We were nearly a month in passing over one savanna after another. In the interval there are several low granitic beds, stretching, as the savannas, northerly and southerly. During this time we shot only a few deer, but many geese, ducks, and beavers, which, with trouts, constituted our principal food. When we had no game to subsist on, the killing of which although certain was irregular, we subsisted on berries, which some spots produced in prodigal abundance. I longed for bread for about ten days after our stock was consumed, but after that did not miss it.

When we met deer in a herd, we seldom failed in shooting the fattest. The venison was excellent; the fat upon the haunches of some of them was two inches in thickness. We shot them with ball or swan shot, according to distance. The leading stag of a herd is generally the fattest, he is as tall as a horse, and must sometimes be shot at full speed, sometimes by surprise. The ball having pierced him, he

bounds, gallops, canters, faulters, stands, and tosses his antlers; his sinewy limbs quiver, unwillingly bend, and he stretches out his graceful corpse. Should the ball have passed through his heart, he falls at once, probably balanced on all fours. There is regret as well as triumph felt in taking possession of the noble vanquished. The broad spreading hoofs of the deer are admirably formed preventing their sinking into the marshes. A single deer on the plain, when there are no others near to give the alarm, may be approached and knocked down by a blow on the head with an axe or tomahawk from a dexterous hunter. We happened to see a solitary stag amusing himself by rubbing his antlers against a larch tree on a plain; my Indian, treading lightly, approached him from behind, and struck him on the head with his axe, but did not knock him down; he of course galloped off. The flesh of the beaver is by the Indians esteemed the finest of all quadrupeds of the chase, and that of the young beaver justly so—in taste it is more like lamb than any other meat. In butchering it, with the skin is flayed off the lining of fat, which is sometimes two inches thick round the body. Beavers are commonly shot on the water; they seldom come out of their houses by day, but are abroad all night. Before sunrise the hunter posts himself undiscovered as near as possible to the leeward side of their house; the beavers at that time come out, one following another. Directly any of their heads appear above the water, it is fired at either with ball or shot, and sometimes a whole family is thus killed in succession. If any escape, their return to their house is watched before sunrise next morning, in like manner as their departure was in the evening. Their bodies float to the shore. The black duck shot in the interior, remote from the sea, is the finest bird for the table in Newfoundland. The trouts are so easily caught in the rivulets in the interior, they being unacquainted with enemies, as to take the artificial fly, merely by holding out the line in the hand without a rod. No country in the world can

afford finer sport than the interior of this island in the months of August and September. The beasts of the chase are of a large class, and the cover for all game excellent.

The waters which we crossed contributed sometimes to the rivers of the north, and sometimes to those of the south-side of the island. We occasionally crossed some of the large lakes on rafts, when our course lay across them and the wind happened to be fair, and there appeared nothing to induce us to go round their extremities. We accomplished this by fastening together three or four trunks of trees with withes, and held up a thick bush for a sail, and were blown over. There was of course considerable risk to our accoutrements attending this primitive mode of navigation. The proportion of water to land in the savannas country is very great. In some directions northward one-half seems to be lakes, of every size and form; in other directions one-third, and seldom less. The marbled glossy surface, as it appeared from the rising ground, was singularly novel and picturesque.

In some of the forests stripes of the trees are all borne down in the same direction flat to the earth by wind, and the havoc displayed is awful. Such parts were almost impassable. The way through the woods elsewhere, except by the deer paths, is obstructed by wind-fallen trees and brushwood. There are extensive districts remarkable for abundance of berries towards the centre of the island, which attract great numbers of black bears. The paths or beats of these animals throughout their feeding grounds are stamped with marks of antiquity seemingly co-eval with the country. The points of rocks that happen to project in their way are perfectly polished from having been continually trodden and rubbed. Although we had seen fresh tracks of wolves every day, and were sometimes within a few yards of them in the thickets, yet we only caught a glimpse of one of them. They lie in wait amongst the bushes and listen for the approach of deer and rush upon them. When they saw man

instead of deer they immediately fled. There are two kinds of wolves here—one large, that prowls singly or in couples, another small, sometimes met with in packs.

Taking a general view of the mineralogy of the savanna territory, the rocks of the savannas are granite quartz, and chlorite greenstone, the same as already noticed, mica, chlorite, and transition clay slates. The granite is pink and grey, and sienitic. It throws itself in low beds lying northerly and southerly, higher than the savannas, and also appears with the greenstone and slate rocks at the edges of the lakes, and other water courses. It occurs of a globular structure on the verge of the savanna country westward of that branch of Clode Sound river which we crossed. The balls are round, and vary in size from a few inches to a fathom and upwards in diameter. In the whole of this savanna territory, which forms the eastern central portion of the interior, there rises but one mountain, which is a solitary peak or pap of granite, standing very conspicuous about forty-five miles north from the mouth of the west Salmon River of Fortune Bay on the south coast. It served as an object by which to check our course and distance for about two weeks. I named it Mount Sylvester, the name of my Indian. The bed of granite, of which Mount Sylvester is a part, is exposed in a remarkable manner to the northeast of that pap near Gower Lake. Here are displayed the features of the summit of an immense mountain mass, as if just peeping above the earth; huge blocks of red, pink and grey granite—often very coarse grained, and of quartz—but compact and granular, lie in cumbrous and confused heaps, “like the ruins of a world,” over which we had to climb, leap, slide and creep. They sometimes lie in fantastical positions—upon an enormous mass of gray granite may be seen, as if balanced on a small point of contact, another huge mass of red granite more durable in quality, and this crowned by a third boulder. Their equilibrium invites the beholder to press his shoulder to them to con-

vince him of his feebleness. These masses seem to be the remaining nodules of strata or beds that once existed here ; the more perishable parts having long since crumbled and disappeared, thus evincing the power of time. Quartz rock, both granular and compact, the latter sometimes rose-coloured, occurs, associated with granite. On the summit of a low bristly ridge, formed principally of granular quartz, nearly half way across the Island, are two large masses of granular quartz, standing apart at the bottom, and nearly meeting at top ; seen at a distance from the North or South, they have the appearance of one mass with a hole through it. Hence this spot is called Rock Hole by the Indians. Plates of mica, six inches and upwards in length, are found attached to the quartz when the latter is associated with granite. Rolled agates, sometimes transparent, are found on the shores of some of the lakes ; mica slate often occurs ; and at Carson lake it immediately joins coarse red granite. Chlorite slate of a peculiar granular texture is met with to the north of Mount Sylvester. The series of clay slate rocks alternates everywhere with thick strata of the chlorite greenstone, which, owing to its greater durability, projects in outgoings above these, and is therefore oftener seen ; the clay, alum, and roof slates have iron pyrites imbedded.

Throughout this great Eastern Division of the interior, we did not see even the signs of any alluvial soil. This province of savannas, although of no territorial value at present, is destined to become a very important integral part of Newfoundland. Judging from their countless paths, and from the size and condition of the few deer we met, it is already seemingly amply stocked with that kind of cattle of which no part of North East America possesses so peculiar a territory. What superficial drainage and tilling might effect towards raising of green crops here remains to be proved. Many of the savannas exhibit proofs of being once wooded ; and in some places with a much larger growth of trees than that at present in their vicinity. Roots of large

trees, with portions of the trunks attached, and lying near, are sometimes seen occupying evidently the original savanna soil on which they grew, but are now partially, or wholly covered with savanna fires, originating with the Indians, and from lightning, have in many parts destroyed the forest; and it would seem that a century or more must elapse in this climate before a forest of the same magnitude of growth can be re-produced *naturally* on the savannas. It is observed of peat,* that "burning, and the turning of the surface by agricultural implements are the chief means by which the vegetation of these soils is exchanged for more profitable plants. To these must be added the growth of larch, under which the original covering is gradually extirpated and replaced by a green and grassy surface, applicable to the pasturage of cattle." Larch, of all other trees, is that to which this climate and the savanna soil are most congenial. The savannas are almost invariably skirted with it, and it grows from the wettest swamp to the summits of the highest hills where fir cannot live. The fruit of the sarsaparilla, two kinds, *Smilax rotundifolia*, and *S. Sarsaparilla* were ripe and vegetating in the beginning of October. Wild currants, gooseberries and raspberries were plentiful in many places; the latter, as in all other parts of North America, only where the woods have been recently burnt. The berries here are much superior to the berries of the same species near the sea coast. They appear to grow for little immediate purpose; as the quantity which the bears, foxes, and the birds fatten upon is comparatively inconsiderable to that produced. The different varieties of whortleberry are very distinctly marked; some of them grow to a size and perfection that would render them esteemed rather than a fine fruit in any country.

Fogs are not frequent in the interior. There was not a foggy day until the fourth of October, which came with a

* By Dr. McCulloch in his valuable paper "On Peat" in the Edinburgh Philosophical Journal, No. 3 and 4, 1820.

southerly wind. There was no frost to hurt vegetation materially until the third of October, and that unaccompanied with snow. But the frost of that night changed one-half of the vegetation on the surface of the savannas from a light vegetable green to a yellow colour. Our attention was arrested twice by observing the tracks of a man on the savannas. After a scrupulous and minute examination, we concluded that one of them was that of a Mickmack or mountaineer Indian, who had been hunting here in the preceding year, and from the point of the foot being steep that he was going, laden with furs, to the Bay of Despair. The other track was on the shores of Gower Lake, of an Indian who had passed by this season apparently from the Bay of Despair towards Gander Bay. We saw no traces however of the Red Indians. The print of a foot remains distinct on the soft surface of the savannas for years or longer. Any track or course differing from those of the deer, in their usual undisturbed walks, is detected by the eye at once.

October 7th.—The nights and mornings were now frosty ; and the vegetable kingdom had put on its autumnal colouring of various tints. The waters as well as the air were becoming more chilly every day. A favourable change of wind did not now bring the accustomed mildness of temperature.

We had been occupied since the eleventh September in travelling the savanna country.

A hilly ridge in the westward, lying northerly and southerly, which had been in view several days, and about the centre of the Island, on our near approach bore an aspect different from any we had yet seen; appearing of a bright brown colour along the summit—bristly and castellated. The rocks for some miles to the eastward were often of various colours, and impregnated with iron, and the shores of the lakes presented remarkable coloured stones, resembling pieces of burnt clay and broken pottery. On arriving on it

this ridge proved to be a serpentine deposit, including a variety of rocks, all lying in nearly vertical strata alternating. The conspicuous points were the large angular blocks of quartz rock, lying on out goings of the same, ranged along the summit. This rock was very ponderous, owing to much disseminated iron pyrites, the oxidation of which, externally, gave it the brown colour. The fresh fracture exhibited a metallic reddish grey. The mineralogical appearances here were altogether so singular that I resolved to stop a day or two to examine them. All the highest parts of the ridge were formed of this metalline rock, and were extremely sterile. The other rocks were, noble serpentine—varying in colour from black green to a yellow, and from translucent to semi-transparent, in strata nearly a yard wide—steatite, or soap stone, *verde antique*, *diallege*, and various other magnesian rocks. Sterile red earthy patches, entirely destitute of vegetation, were here and there on and adjacent to the ridge, and on these lay heaps of loose fragments of asbestos, rock wood, rock cork, rock leather, rock horn, rock bone, and stones light in the hand, resembling burnt clay—*Cum multis aliis*, the whole having the appearance of heaps of rubbish from a pottery, but evidently detached from adjoining strata and veins. I could not divest myself from the feeling that we were in the vicinity of a quiescent volcano.

The beaches of many of the lakes of the neighbourhood, as already noticed, are formed of disintegrated fragments of those rocks. At one lake in particular, which I in consequence denominated Serpentine Lake, the beauty and interesting appearance of some of the beaches, composed entirely of rolled fragments of those rocks of every kind and colour, the red, yellow, and green prevailing, may be fancied better than described. A part of the eastern shore is formed of a hard greenish gray rock, in large loose flags, indented straight grooves, which, when struck as we tread upon them, emitted sound like pieces of metal. Serpentine Lake is comparatively small, being about two miles and a half in

length by one in breadth. It is known to the Mickmack Indian by the Indian name for it, or Stone Pipe Lake, from their procuring here verd antique, and other magnesian rocks, out of which they carve or chisel tobacco-pipes, much prized by them. This people then, like the ancients of the old world, are not unacquainted with the incombustible nature of the magnesia minerals.

In the woods on the margin of Serpentine Lake we found an old birch-rind canoe of the Mickmack Indians, the same as those used by these people at the sea coast. It had been brought up from the Bay of Despair at the south coast of the Island, by them of the Cod Roy River, which runs through this and intervening lakes. From the circumstance of finding this canoe here, we inferred that the portages between Serpentine Lake and the sea coast were not very extensive or difficult. Here then is a route of the Indians by which the centre of the Island may be approached with the same canoe, and close by are the sources of rivers that flow to the north coast. There was an inhabited beaver's house at the south end of Serpentine Lake, and we shot three of the family that occupied it for food. There were several herds of deer around. The white-headed eagle was also an inhabitant of this part.

This interesting ridge and district, which forms the centre nearly of Newfoundland, I designated in honor of an excellent friend and distinguished promoter of science and enterprise—Professor Jameson, of Edinburgh—Jameson's Mountains. Judging from the rise in the land for about thirty miles to the eastward, they are about twelve hundred feet above the level of the sea. Future travellers may easily reach Jameson's Mountains by the route mentioned; and I hope some may soon follow the first there, for they deserve a much more perfect examination than could be given on a first visit by a half worn-out pedestrian traveller.

October 10th.—Being now near the centre of the Island, upwards of one hundred and ten miles from the most inland

part of Trinity Bay, about ninety miles of the distance being across the savannas—we had not yet seen a trace of the Red Indians. It had been supposed that all the central parts of the Island were occupied by these people, and I had been daily looking out for them. They were however more likely to be fallen in with farther to the westward. Taking a retrospective, as well as a prospective geological view from Jameson's Mountains, the serpentine deposit of which they are formed separates the low slate country, covered with savannas, through which the granitic rocks occasionally peep, in the east, from a high and entirely granitic country that appears in the west. It was now nearly five weeks since with my Indian I left the sea coast, and was just half-way to St. George's Bay. We had for some time past felt severely the effects of continued excessive exertion, of wet, and of irregular supplies of food. My Indian, and only companion, complained much of the never-ending toil, and would willingly have gone out to the sea, if I had yielded to his wish. But with me it was "now or never;" and I had apprehensions of being overtaken by the winter ere we could reach St. George's Bay. To keep my Indian at the toilsome task, I had sometimes to encourage him by promises of future reward, sometimes to excite his emulation by allusions to the fame of the Indian hunters for enduring fatigue and hardships beyond what the white man could bear; and again to picture the shame consequent on his leaving me in the country to perform alone what we had set out to do together.

PART V.

CONTINUE THE JOURNEY INTO THE WESTERN INTERIOR.

In the West, mountain succeeds mountain in irregular succession, rugged and bleak. Encumbered with many additional mineralogical specimens, we took our departure from the interesting central mountains, for my part hoping that I might yet see them again. Immediately on the

west, they are succeeded by *gneiss*, and next to that comes the hungry granitic territory, still almost as barren to imagination as at the creation. Wacke, or conglomerate, is associated with the *gneiss* in tortuous strata, veins, and stripes, indicative of metalline qualities. We were sometimes compelled to climb and creep our way over confused heaps of granite and white compact quartz. There are occasional marshes, and some of the less exposed spots produce stunted spruce and larch trees; other spots produce ground berries in great plenty. A species of *Ledum* or Indian tea is met with here, different from that commonly found at the sea coast. It is a more perfectly formed shrub, with smaller, rounder, and more numerous leaves; lichens grow everywhere, from the edge of the lake to the mountain top, and deer now begin to appear in small herds in every direction.

October 11th.—While surveying a large lake in the southwest we descried a faint column of smoke issuing from amongst islands near the south shore, about five miles distant. The time we hoped had at last come to meet the Red Indians. Rivers rise here, as they had throughout our journey, owing to our track being central, that run to both sides of the Island, but it could not be seen to which side this lake contributed its waters. The Red Indians had been reported not to frequent the south side of the Island. It was too late in the day to reconnoitre; and my Indian went in pursuit of a herd of deer in another direction, we having no provision for supper. At sunset he did not meet me at the appointed wood in a valley hard by, nor did he return by midnight, nor at all. I dared not exhibit a fire on the hill, as a beacon to him, in sight of the strange encampment. His gun might have burst and injured him; he might have fled, or been surprised by the party on the lake.

October 12th.—At daybreak the atmosphere was frosty, and the slender white column of smoke still more distinctly seen. There were human beings there, and, deserted, I

felt an irresistible desire to approach my fellow creatures whether they should prove friendly or hostile. Having put my gun and pistols in the best order, and no appearance of my Indian at noon, I left my knapsack and all incumbrances, and descended through thickets and marshes towards the nearest part of the lake, about two miles distant. The white sandy shore, formed of disintegrated granite, was much trodden over by deer and other animals, but there were no marks of man discernable. The extent of the lake was uncertain ; but it was apparent that it would require two days at least to walk round either end to the nearest point of the opposite shore to the occupied island. I therefore kept on my own side to discover who the party were. By firing off my gun, if the party were Red Indians, they would in all probability move off quickly on hearing the report, and they having no firearms, my fire would not be answered. If they were other Indians my fire would be returned. I fired. By and by the report of a strange gun travelled among the islands from the direction of the smoke, and thus all my doubts and apprehensions were dispelled. The report of this gun was the first noise I had heard caused by man, except by my Indian and myself, for more than five weeks, and it excited very peculiar feelings.

In about an hour my lost Indian unexpectedly made his appearance from the direction where we had parted on the preceding evening, brought to the spot by the report of my gun. He accounted for himself, "that after having shot a stag about two miles from the spot appointed for our encampment, he attempted to get round the west end of the lake to reconnoitre the party on the island, but found the distance too great, and getting benighted, had slept in the woods."

Soon afterwards, to my great delight, there appeared among some woody islets in front, which precluded the view of the other side of the lake, a small canoe with a man seated in the stern, paddling softly towards us, with an air of serenity

and independence possessed only by the Indian. After a brotherly salutation with me, and the two Indians kissing each other, the hunter proved to be unable to speak English or French. They, however, soon understood one another, for the stranger, although a mountaineer from Labrador, could speak a little of the Mickmack language, his wife being a Mickmack. The mountaineer tribe belongs to Labrador, and he told us that he had come to Newfoundland, hearing that it was a better hunting country than his own, and that he was now on his way hunting from St. George's Bay to the Bay of Despair to spend the winter with the Indians there. He had left St. George's Bay two months before, and expected to be at the Bay of Despair in two weeks hence. This was his second year in Newfoundland; he was accompanied by his wife only. My Indian told him that I had come to see the rocks, the deer, the beavers, and the Red Indians, and to tell King George what was going on in the middle of that country. He said St. George's Bay was about two weeks walk from us if we knew the best way, and invited us over with him in his canoe to rest a day at his camp, where he said he had plenty of venison, which was readily agreed to on my part.

The island on which the mountaineer's camp was, lay about three miles distant. The varying scenery as we paddled towards it, amongst innumerable islands and inlets, all of granite, and mostly covered with spruce and birch trees, was beautiful. His canoe was similar to those described to have been used by the ancient Britons on the invasion by the Romans. It was made of wicker-work, covered over outside with deer skins sewed together and stretched on it, nearly of the usual form of canoes, with a bar or beam across the middle, and one on each end to strengthen it. The skin covering, flesh side out, was fastened or laced to the gunwales, with thongs of the same material. Owing to decay and wear it requires to be renewed once in from six to twelve weeks. It is in

these temporary barks that the Indians of Newfoundland of the present day navigate the lakes and rivers of the interior. They are easily carried, owing to their lightness, across the portages from one water to another, and when damaged easily repaired. There were innumerable granite rocks in the lake a little below and above the surface; on one of these our canoe struck and rubbed a hole through the half-decayed skin, and was attended with some risk to our persons and guns. His wigwam was situated in the centre of a wooded islet at which we arrived before sunset. The approach from the landing place was by a mossy carpeted avenue, formed by the trees having been cut down in that direction for firewood. The sight of a fire, not of our own kindling, of which we were to partake, seemed hospitality. It was occupied by his wife, seated on a deer skin, busy sewing together skins of the same kind to renew the outside of the canoe we had just found, which required it. A large Newfoundland dog, her only companion in her husband's absence, had welcomed us at the landing-place with signs of the greatest joy. Sylvan happiness reigned here. His wigwam was of a semicircular form, covered with birch rind and dried deer skins, the fire on the fore ground outside. Abundance and neatness pervaded the encampment. On horizontal poles over the fire, hung quantities of venison steaks, being smoked dry. The hostess was cheerful, and a supper, the best the chase could furnish, was soon set before us on sheets of birch rind. They told me to "make their camp my own, and use everything in it as such." Kindness so elegantly tendered by these people of nature in their solitude, commenced to soften those feelings which had been fortified against receiving any comfort except that of my own administering. The excellence of the venison, and of the flesh of young beavers, could not be surpassed. A cake of hard deer's fat, with scraps of suet, toasted brown, intermixed, was eaten with the meat; soup was the drink. Our hostess after supper sang several Indian songs at my request.

They were plaintive, and sung in a high key. The song of a female, and her contentment in this remote and secluded spot, exhibited the strange diversity there is in human nature. My Indian entertained them incessantly until nearly daylight with stories about what he had seen in St. John's. Our toils were for the time forgotten. The mountaineer had occupied this camp for about two weeks, deer being very plenty all around the lake. His larder, which was a kind of shed, erected on the rocky shore for the sake of a free circulation of air, was in reality a well-stocked butcher's stall, containing parts of some half-dozen fat deer, also the carcasses of beavers, of otters, of musk rats, and of martens, all methodically laid out. His property consisted of two guns and ammunition, an axe, some good culinary utensils of iron and tin, blankets, an apartment of dried deer skins to sleep on and with which to cover his wigwam—the latter with the hair off; a collection of skins to sell at the sea coast, consisting of those of beaver, otter, marten, musk rat, and deer, the last dried and the hair off; also a stock of dried venison in bundles. Animal flesh of every kind, in steaks, without salt, smoke-dried on the fire for forty-eight hours, becomes nearly as light and portable as cork, and will keep sound for years. It thus forms a good substitute for bread, and by being boiled two hours recovers most of its original qualities.

The Red Indians country, or the waters which they frequented, we were told by the mountaineer, lay six or seven miles to the north of us, but at this season of the year these people were likely to be farther to the northward at the Great Lake of the Red Indians; also, that about two weeks before there was a party of Mickmack hunting at the next large lake to the westward, about two days walk from us, and that the deer were very plentiful to the westward. He also described the nature of the country, and made drawings upon sheets of birch-rind of the lakes, rivers, mountains, and woods that lay in the best route to St. George's harbor. He

kept a register, ascertaining when Christmas Day would arrive; having ascertained at St. George's Bay the number of days intervening, he cut a notch on a stick every morning to the number of that holiday. He had missed a day and now rectified the mistake. This lake, called Mcelpegh, or Crooked lake, by the Indians, I also named in honor of Professor Jameson. It is nine or ten miles in length, by from one to three in breadth, joined by a strait to another lake nearly as large, lying south east, called Burnt Bay Lake, and is one of the chain of lakes connected by the East Bay River of the Bay of Despair, already noticed as running through Serpentine Lake, which forms a part of the great route of the Indians.

October 14th.—We left the veteran mountaineer (James John by name) much pleased with our having fallen in with him. He landed us from his canoe on the south shore of the lake, and we took our departure for the westward, along the south side. Truly could this man proclaim :

"I'm monarch of all I survey,
My right there is none to dispute;
From the centre all round to the sea,
I am lord of the fowl and the brute."

October 15th.—There is a considerable quantity of fir woods on the borders of Jameson's Lake. We fell in with a summer as well as a winter beavers' house, both of them inhabited, evidently by the same family, this being the time when they are changing their abodes. We found none of them however at home. The houses were about half-a-mile apart, the summer one on the edge of an artificial dam, and the winter one in the middle of a small pond, surrounded with birch trees on the acclivity of a hill. The first snow fell this afternoon with a gentle wind from the north-north-east, and so thick as to compel us to shelter and encamp in a wood that happened fortunately to be near. It continued to snow so heavy that at midnight our fire was extinguished and firewood buried; but the silent uniform fall and

pressure of the snow over our screen, and the blankets in which we were wrapped, kept us warm.

October 16th.—In the morning three feet of snow covered the ground in the woods, and on the open ground it was deeper. Our provisions were exhausted, nor could we get through the snow to look for game. Weakened and miserable, we looked anxiously for a change of wind and thaw. The trees were loaded with snow. At night a thaw came, but with it a southerly wind that brought both the snow and many of the largest trees to the ground together. There being no frost in the ground, the roots of the trees were not sufficiently bound in the earth to stand under the extraordinary pressure of snow and wind. Our fire was buried again and again by the snow from the trees, and as we were as likely to be killed while standing up as lying down, by the trees that crashed and shook the ground around us all night, we lay still wrapped in our blankets amidst the danger, and providentially escaped unhurt. The birch had attained a pretty large size in this sheltered spot, under the lie of a hill, which I called Mount Misery. In the forest, while the storm rages above, it is calm at the foot of the trees.

October 17th.—We were still storm-stayed, and could only view the wreck of the forest close to us. Our situation was truly miserable; but the snow was fast melting away. I felt alarmed at the winter setting in thus early, for the consequences ere we could reach the sea coast.

October 18th.—The snow having shrunk a foot at least, we left our wretched encampment, and after a most laborious walk of six or eight miles through snow, thickets, and swollen brooks, and passing many deer, scraping holes in the snow with their hoofs to reach the lichens underneath, without however being able to get within shot of them, we not only reached the lake to the westward, but to our great joy also discovered, in consequence of meeting with some of their marten traps, the encampment of the Indians of whom

we had been told by the mountaineer. My dress, once gray, now bleached white, was seen by some of the Indians as we emerged from a spruce thicket, a great distance off. The party were encamped in one large wigwam, or kind of hut. We entered with little ceremony, my Indian kissing them all—male and female. None of them could speak English, and only one a little French. A deer skin was spread for me to sit on, at the innermost part of the dwelling. My Indian interpreted, and introduced me in the same particular terms as before. They were Mickmacks and natives of Newfoundland, and expressed themselves glad to see me in the middle of their country, as the first white man that had ever been here. The Indian amongst his fellows is a purely self-dependent being—an innate power of self-denial raises him above dependence upon others, and keeps him beyond their interference, even in distressing wants, which yields mental triumph and glory. Want implies inability in the hunter. I observed these people bestow, and my Indian receive attention, with seeming indifference. He smoked the pipe given to him with the same composure as after a feast, although starvation and unconcealable hunger were depicted in his countenance. Supper was soon ready, which consisted entirely of boiled venison. All seated around the fire, in the centre of the wigwam, partook at once—although, enfeebled by want of sustenance, I could eat only a few mouthfulls. The jaws would not perform their office without great pain from want of practice. Fortunately the stomach sympathised, for it could bear but little. They told us that we might reach Saint George's Bay in about ten days; that they had left that place in the middle of summer, and had since then been hunting in the western interior,—several weeks latterly having been spent at this lake, where deer were plenty; and that they intended in a few weeks hence, before the lakes and rivers were frozen over, to repair to White Bear Bay, at the southward, to spend the winter, that place

having been always celebrated for immense herds of deer passing by in the winter season. The Indian idea of a road is to Europeans little else than a probability of *reaching* a distant place *alive*; and I foresaw, from their report, much suffering before we could reach St. George's Bay. Here were three families amounting to thirteen persons in number. The men and boys wore surtouts made of deer skins, the hair outside, buttoned and belted round them, which looked neat and comfortable. Their caps were of mixed fur; they had not procured much fur for sale, only a few dozen marten, some otter and musk rat skins; of beaver skins they had very few, as beavers are scarce in the western interior, it being too mountainous for woods, except on the sheltered borders of some of the lakes. In the woods around the margin of this lake the Indians had lines of path equal to eight or ten miles in extent, set with wooden traps, or dead falls, about one hundred yards apart, baited for martens, which they visited every second day. They had two skin canoes in which they paddled around the lake to visit their traps and bring home their game. The Red Indian country we were told was about ten or fifteen miles northward of us, but that at this time, as the mountaineer had likewise informed us, these people were all farther to the northward, at the Great Lake, where they were accustomed to lay up their winter stock of venison. Those people corroborated previous, as well as subsequent inquiries, respecting the number of their own, and of the other communicating tribes in the Island.

PART VI.

OF THE RED INDIANS AND THE OTHER TRIBES.

All the Indians in the Island, exclusive of the Red Indians, amount to nearly a hundred and fifty, dispersed in bands, commonly at the following places or districts:—St. George's Harbour and Great Cod Roy River on the west coast; White Bear Bay, and the Bay of Despair on the south coast; Clode

Sound in Bonavista Bay on the east; Gander Bay on the north coast, and occasionally at Bonne Bay and the Bay of Islands on the north-west coast. They are composed of Mickmacks, joined by some of the mountaineer tribe from the Labrador, and a few of the Abenekies from Canada. The Esquimaux, from Labrador, occasionally, but seldom, visit the Island. There are twenty-seven or twenty-eight families altogether, averaging five to each family, and five or six single men. They all follow the same mode of life—hunting in the interior, from the middle of summer till the beginning of winter in the single families, or in two or three families together. They go from lake to lake, hunting all over the country, around one before they proceed to the next. They paddle along the borders, and the men proceed on foot up every rivulet, brook, and rill, beavers being their primary object of search, otters, martens, musk rats, and every living thing; secondly, when the lakes are connected by rivers, or when the portages between them are short, they proceed in or carry their canoes with them; otherwise they leave these, and build others on arriving at their destination. The hunting season, which is the months of September and October, being over, they repair to the sea coast with their furs, and barter them for ammunition, clothing, tea, rum, &c., and then most of them retire to spend the winter at or near the mouths of the large rivers, where eels are to be procured through the ice by spearing, endeavouring at the same time to gain access to the winter paths of the deer. A great division of the interior of Newfoundland is exclusively possessed and hunted over by Red Indians, and is considered as their territory by the others. In former times, when the several tribes were upon an equality in respect of weapons, the Red Indians were considered invincible, and frequently waged war upon the rest, until the latter got fire-arms put into their hands by Europeans. The Red Indians are even feared yet, and described as very large athletic men. They occupy the Great or Red Indian Lake, and many other lakes

in the northern part of the Island, as well as the great River Exploits. Along the banks of this river, and at the Great Lake, they are said to have extensive fences or pounds, by which they ensnare deer, and thus procure regularly in every fall a supply of venison for winter provisions. Two of the Indians here had several times fallen in with the Red Indians, and on one occasion obtained possession of their camp, in which they assert they found some European blankets and other articles of clothing, which it is presumed they must have pilfered. They also stated that the Red Indians use the same kind of skin canoes in the interior as they themselves do, and that they paint themselves all over. The ancient Britons painted their bodies blue at the period they used canoes of a similar description in the interior of the Island. The tribes, exclusive of the Red Indians, have no chief in Newfoundland, but there are several individuals at St. George's Bay to whom they all pay a deference. The Mickmacks, although most of them born in this Island, consider Cape Breton, where the chiefs reside, as their head-quarters. Their several tribes intermarry. These people might be rendered useful if some of the leaders were noticed by the British Government. Had this been earlier done it might have saved that tarnish on humanity, the butchery of the interesting aborigines, the Red Indians, by Englishmen. The communicating tribes consume their share of British manufactures, and mainly contribute to the support of the furtrade of the Island. The French have their principal confidence and affection. The most important subject to the Indians at present, connected with His Majesty's Government, relates to beaver-hunting. They are most anxious that King George, as they call His Majesty, should make a law to prevent the hunting of beavers in the spring season. They acknowledge the practice of hunting them then, and also that the practice will soon destroy them altogether, as the animals are then with young. But they cannot desist of their own accord, being by nature hunters. They state that a con-

siderable traffic has been carried on in venison between some of the Indians at White Bear Bay and the French at the Island of St. Peters. In one instance a single Indian has been known to convey over forty carcasses at once, and sell them for twenty shillings each. The capabilities of some of the Indians in hunting seem almost incredible to those who have not seen their powers tried. Some single Indians will run down a stag; when the stag is fat, he is sometimes worth such an arduous pursuit, and it is then only he is liable to be fatigued to exhaustion. The hunter will commence the chase early in the day, and by following it up without intermission, will before night make the stag his prey without firing a shot. The stag at first easily outstrips his pursuer, but after a run of four or five miles he stops and is by and bye overtaken; again he sets off, and again he is overtaken; again, and again, he is overtaken; he lies down fatigued but is again surprised; thus the chase is kept up, until the poor stag, in despair of eluding his pursuer, plunges into a pool or morass to escape, Man at last winning the day. The Indians find their way through the forests by marks with which they are familiar. Thus moss grows on the north not on the south side of the trees; the tops and branches of trees have an inclination or stretching to the south-east; wind-fallen trees point to the northward, &c. They have a call or toll for every kind of beast and bird to bring them within shot—for the deer an outward snort, to imitate the stag; for the beaver a hiss, &c.; for the otter a whistle, &c. They are Roman Catholics, but their religious ceremonies, of which they are observant, consist of a combination of that church and their own primitive ceremonies blended together, to suit their convenience and tastes. The inmates of the camp, by the earliest dawn of day, all joined in prayer; and nearly the whole of a Sunday, on which it happened I was with them, they spent in singing hymns. They had in their possession a French manuscript of sacred music, given to them, they said, by

the French Roman Catholic clergyman at the Island of St. Peters, whom they consider their confessor, and endeavour to see once in two years. One of the Mickmacks of this party, named Paul, boasted of maternal descent from a French Governor of Prince Edward Island.

The Indians seldom carry salt with them into the interior, nor, with very few exceptions, do they require it. They never carry spirits, the excessive use of which, by a few of them, when at the coast, enervates and renders them incapable for the time of undergoing the fatigue, abstinence, and exposure to weather, which they afterwards bear to a surprising degree, as a duty, without any immediate ill effects. The Red Indians are, of course, unacquainted with salt, as well as with all foreign luxuries; when their food is altogether animal salt is not desired, nor does it seem to be necessary. Supper is the chief repast with the hunter; in the evening he enjoys the fruits of the day's chase, and recounts in his turn his adventures. Most of the Indians, when they would otherwise be in the prime of life, have broken constitutions by over-exertions, casualties, and exposure to weather. Their perilous mode of life also leads them to be more subject to some kinds of bodily infirmities than men in more dense societies. They have most of their remedies within themselves. The following plants, among others, are used medicinally by them—

PLANTS.	PART USED	PREPARATION.	HOW ADMINISTERED.	DISEASE.
<i>Geum vivale</i> , or chocolate root.	Root.	Strong decoction.	Drank, a jill two or three times a day or oftener.	Dysentery, colds and coughs, particularly for children.
<i>Sarracenia purpurea</i> , or Indian cup.	Root.	Strong decoction.	A table or teaspoonful drunk frequently during the day, with abstinence for several days.	Spitting blood and other pulmonary complaints.
<i>Havernaria dilatata</i> .	Root.	Expressed juice.	Drank, a jill at a time with a little water.	Gravel.

PLANTS.	PART USED	PREPARATION.	HOW ADMINIS- TERED.	DISEASES.
<i>Smilax borealis.</i>	Root.	Expressed juice.	Drank, a jill at a time.	Gravel.
<i>Sorbus Americana</i>	Bark.	Infusion	Drank.	Cholic.
<i>Nymphoc odorato.</i>	Root.	Expressed juice.	Drank.	Coughs.
Ditto Ditto	Root.	Boiled.	Poultice.	Swellings.
<i>Nuphar advena.</i>	Root.	Bruised with flour or meal.		Swellings and bruises.
<i>Mergantnes trifolia.</i>	Root.	Very strong decoction.	Drank.	
<i>Salix (vulgare.)</i>	Root.	Scrape into spirits	Poultice.	Bruises, sprains and broken bones.
<i>Xalmia angustifolia.</i>	Leaves.	Hot water with very weak infusion — poison, if strong.	Drank.	Stomach complaints.
<i>Pinus Balsamea, P. Strobus, Young, and P. Microcarpa.</i>	Inner bark	Boiled.		Sores, swellings &c.
<i>Cornus stricta.</i>	Bark.	Dried.	Mixed with tobacco for smoking.	
<i>Taxus Canadensis</i>	Leaves.	Very strong concentrated decoction.	As a green dye.	
<i>Salix (vulgari.)</i>	Root.		As a black dye.	
Ditto Ditto	Leaves.	Bruised with hot water.		Sprains and bruises.
<i>Vaccinium hispidulum.</i>	Leaves or the plant	Decoction.	As a tea	
<i>Ledum Dalifolium</i>	Leaves.	Decoction.	As a tea.	Diuretic.
<i>Pinus Microcarpa</i>	Boughs.	Decoction.	As a tea.	Diuretic.
<i>Sorbus Americana</i>	Bark	Infusion.	As a tea.	

The liscivium from the ashes of deers' bones is drank as an astringent. The yolk of eggs and turpentine, equal parts, or vary the proportions with the nature of the sore, applied as a salve, is said to have effected cures in desperate cases of ulcers.

October 21st.—The weather having been mild for the last few days, much of the snow had dissolved, it lay chiefly on banks. The Indians put us across the lake, and we took our departure for the westward, refreshed by our two days stay with them. The country now became mountainous, and almost destitute of wood, deer became more numerous, berries were very plentiful, and mostly in high perfection, although the snow had lately covered them. Indeed the partridge berries were improved, and many spots were literally red with them.

October 22nd.—On our march to-day we discovered a black

bear feeding on berries on a hill about a mile off, and stole upon him unawares by a circuitous route from the leeward. We fired a shot each at him, both of which had effect; but he ran a mile before he fell. He was very fat, weighing about three hundred and fifty pounds. The fat round his body was four inches in some parts. We rested two days to feast on him, leaving the remainder, except what we could conveniently carry, with regret, from a lively apprehension of the future want of it. Bear's flesh is by many of the Indians esteemed next to that of beavers, and it has the peculiar quality of not clogging the stomach, however much of it is eaten. My Indian apprised me of this circumstance before hand, and availed himself of the fact, for on the night of the death of bruin, after we had both began, as I thought, to sleep, about two o'clock, a.m., I found him busy roasting, frying, and devouring as voraciously as if he had eaten no supper.

October 24th.—The winter had now fairly set in, the ponds were all frozen over, the birds of passage had deserted the interior of the sea coast, and the grouse had got on their white winter coats; many hardships now await the traveller.

PART VII.

GENERAL FEATURES OF THE WESTERN INTERIOR, ETC.

October 27th.—The western territory is entirely primitive. No rocks appear but granitic. The only soil is peat, which varies in quality according to situation. In the valleys some patches are very similar to the savanna peat in the eastward, but as the peat ascends, it becomes shallower and lighter until it terminates at the summit of the mountains in a mere matting; lichens occupy every station, on the peat, among the other plants, and on the bare rock. The *Arbutus Alpina*, *Potentilla tridentata*, *Empetrum rugum*, and the lichens, occupy the highest resting places for vegetation on the mountain tops. The trees, all vegetating upon peat, are often forced in this region to assume new features. The

larch in particular will grow in spite of the nipping blasts, and where it is not permitted to rise erect on the mountain top, as it does on the lower stations, it creeps along the ground to leeward, where neither the birch nor spruce can exist. It is thus sometimes only a few inches in height, and many feet in length. The spruce fir-thickets are often only a few feet in height, the trees hooked and entangled together in such a manner as to render it practicable to walk upon, but impossible to walk through them. In an extensive flat, barren track, that lay on our left, there are a number of small conical-shaped granite hills, clad with sombre spruce, which resemble islands in an ocean of meagre vegetation. Yet there are here the remains of extensive forests, destroyed by fire, where now there is not a tree within many miles. Neither reptile nor serpent of any kind had yet fallen under our notice, nor had the Indians ever seen or heard of any noxious animal being in the island. It may therefore be concluded that there are none of this class, common on the neighbouring islands and continent, here.

Were the agriculturalists of the coast to come here, they would see herds of cattle, fat on natural produce of the country, sufficient for the supply of provision to the fisheries, and the same animal fit, with a little training, to draw sledges at the rate of twenty miles an hour. Nature has liberally stocked Newfoundland with herds, finer than which Norway and Lapland cannot boast. Some of the reindeer here attain the size of six or seven hundred pounds weight, and even upwards. These natural herds are the best adapted for this climate and pasture; and it is evident on witnessing their numbers, that all that is required to render the interior, now in waste, at once a well-stocked grazing country, could be done through the means of employing qualified herdsmen, who would make themselves familiar with, and accompany these herds from pasture to pasture, as is done in Norway and Lapland with the rein-

deer there, and in Spain with the sheep. When taken young these deer become very domestic and tractable. Were the intelligent *resident* inhabitants of the coast, who have an interest in advancing the country internally, to adopt a plan for effecting this object, under their own vigilance, benefits and comforts now unthought of could be realized. Norwegians or Lapland Finns could be easily introduced into the interior, if the Indians were unwilling or unfit.

We met many thousands of the deer, all hastening to the eastward, on their periodical migration. They had been dispersed since the spring, on the mountains and barren tracts, in the west and north-west division of the interior, to bring forth and rear their young amidst the profusion of lichens and mountain herbage, and where they were, comparatively with the low lands, free from the persecution of flies. When the first frosts, as now in October, nip vegetation, the deer immediately turn towards the south and east, and the first fall of snow quickens their pace in those directions, as we now met them, towards the low grounds where browse is to be got and the snow not so deep over the lichens. In travelling herd follow herd in rapid succession over the whole surface of the country, all bending their course the same way in parallel lines. The herds consist of from twenty to two hundred each, connected by stragglers or piquets, the animals following each other in single files, a few yards or feet apart, as their paths show; were they to be in close bodies, they could not graze freely. They continue to travel south-eastward until February or March, by which time the returning sun has power to soften the snow and permit of their scraping it off to obtain lichens underneath. They then turn round towards the west, and in April are again on the rocky barrens and mountains where their favorite mossy food abounds the most, and where in June they bring forth their young. In October the frosty warning to travel returns. They generally follow the same routes year after year, but these sometimes vary, owing to

irregularities in the seasons and interruptions by the Indians. Such are, in a general view, the courses and causes of the migrations of the deer, and these seem to be the chief design of animated nature in this portion of the earth. Lakes and mountains intervening, cause the lines of the migration paths to deviate from the parallel; and at the necks of land that separate large lakes, at the extremity of lakes, and at the straits and running waters which unite lakes, the deer unavoidably concentrate in travelling. At those passes the Indians encamp in parties, and stay for considerable intervals of time, because they can there procure the deer with comparatively little trouble.

After the first great fall of snow, although the acclivities had been for a few days laid bare by the mild weather, the summits of the mountains remained covered, and the snow lay in banks in the valleys. Light snow-showers afterwards occasionally fell, spreading the veil, and thickening the white mantle of winter in every direction. We suffered much at night from the inclemency of the weather. The trees were here generally so stunted and scanty, that we could hardly collect enough of brushwood and roots to keep a very small fire alive, and then we were unavoidably exposed. At one time, for three nights in succession, we could not find a dry spot of ground to lie upon. In such situations the want of sleep attended the want of shelter; and it was a contest between frost and fire which should have the supremacy over our bodies. Although we could shoot deer at intervals every day, no supply of food was adequate to support the system under the exhaustion and load of painful fatigue which we had to undergo. For my part I could measure my strength—that it would not obey the will and drag along the frame beyond two weeks more. Still it was cheering to hope that that space of time would carry us to the west coast. Ever since we left the last party of Indians, my Indian disputed with me about the course we should pursue, he obstinately insisting upon going to

the southward. Perhaps he had a secret desire not to pass too near the Red Indian country, or he may have heard that some of his tribe were encamped in the direction he was inclined to go. As a separation might have led to serious consequences, I submitted from necessity.

October 28th.—The small lakes were sufficiently frozen over for us to walk upon them. As we advanced westward the aspect of the country became more dreary, and the primitive features more boldly marked. Pointed mountains of coarse red granite, standing apart, lay in all directions northerly and southerly of each other. Most of them are partially shrouded with firs, bald, and capped with snow. As we neared the south end of an extensive lake in order to get round it, we observed a low islet near the middle entirely covered with a large species of gull. Those birds seemed as if they had congregated to take flight before the lake was frozen over. I named this lake in honor of a friend at the bar in Edinburgh, "Wilson's lake." At the extreme south end we had to ford a rapid river of considerable size, running to the southward, which, from its position, we inferred was "Little River," and which discharges at the south coast.

October 29th.—Drawing near to a mountain-ridge, higher than any we had yet crossed, and which from appearance we supposed might be the last between us and the sea coast, we had great satisfaction in discovering smoke rising from a wood on the opposite side of a lake near the foot of it. We indulged in the hope that some timber party from the settlements at St. George's Bay was encamped here. Our toils were in fancy ended. On reaching the lake, the party encamped seemed to distrust us, not venturing to show themselves openly on the shore. After a time, however, they were convinced by our appearance, gestures, and the report of our guns, that we were not Red Indians nor enemies. A canoe was then launched and came across to us. The canoe was of the kind already described, of wicker-

work, covered with skins, and paddled by two pretty Indian girls. I unceremoniously saluted them in the Indian manner, and we accompanied them to their camp. They were of a party of Mickmack Indians, encamped at this lake because deer and firewood were plentiful. One man only belonged to this encampment, and he was out hunting when we arrived. None of the party understood a word of English; my Indian however explained. They told us, to our no little mortification, that we were yet sixty miles from St. George's Harbor, or about five days walk if the weather should happen to be favorable, and that it lay in a north-west direction. The last information proved that my Indian had of late pertinaciously insisted on a wrong course. This small party consisted of eight individuals—one man four women, and three children; one an infant, was strapped or laced to its cradle, and placed upright against the side of a wigwam, as any piece of domestic furniture might be. They had left St. George's Harbor three months before; since then, had been in the interior, and intended to spend the winter at Great Cod Roy River in St. George's Bay. As every hour was precious towards the final accomplishment of my object, I proposed to my Indian host to accompany me to St. George's Bay; my offer was agreed to, and a stipulation made to set off in two hours. In the absence of this Indian, who told me his name was Gabriel, his family—consisting, as already observed, of females and children—were to provide for themselves. For this purpose two guns and ammunition were left with them. One of the young women was a capital shot; during our halt with them she left the camp and shot a fat deer close by. Having partaken of the best piece of venison the interior could produce, together with smoked deers' tongues, we set off. Owing to our enfeebled condition, this man's vigour and strength were enviable.

October 30th.—Rain, snow, and wind, in the early part of the day compelled us to stop and encamp. We shot a hare,

the first we had killed; it was white, except the tips of the ears and tip of the tail, which always remain black. The hare of Newfoundland is the Arctic hare, *Lepus Arcticus*. It sometimes weighs fourteen pounds and upwards. There is no other kind in the Island. The grouse, during severe snow storms at night, allow the snow to drift over them, and thus covered, obtain shelter. While in this situation a silver thaw sometimes comes on, and the incrustation on the surface become too thick for them to break through in the morning, and immense numbers of them perish by being in that manner enclosed. When we were crossing a lake on the ice my Indian fell through and with great exertion saved himself. While he was struggling my new friend Gabriel stood still and laughed; Joe did not look for assistance, nor did the other evince the least disposition to render any, although he was, compared with my position on the lake, near to him. Upon my remonstrating with Gabriel about his manifesting a want of feeling towards Joe, when perishing, Joe himself replied to me, "Master, it is all right; Indian rather die than live owing his life to another." The other had action in sympathy with the self-dependent sentiment.

October 31st.—We travelled over hills and across lakes about twenty miles, fording in that space two rivers running north-easterly, and which are the main source branches of the river Exploits. This large river has therefore a course of upwards of two hundred miles in one direction, taking its rise in the south-west angle of the Island, and discharging at the north-east part. The Indians are all excellent shots, and the two men now with me displayed admirable skill in killing the deer at great distances and at full speed, with single ball. Nearly a foot of snow had recently fallen; which cast a monotonous sublimity over the whole country, and in a great measure concealed the characteristics of the vegetable as well as the mineral kingdoms. We encamped at night at the southern extremity of what is

said by my Indians to be the most southern lake of the interior frequented by the Red Indians, and through which was the main source branch of the River Exploits. At the same lake, the Micmaes and the Indians friendly with them commence and terminate their water excursions from and to the west coast. They here construct their first skin canoes upon entering the interior, or leave their old ones upon setting off on foot for the sea coast. The distance to St. George's Harbor is twenty-five miles or upwards, which part of the journey must be performed on foot, because no waters of any magnitude intervene. I named the lake in honor of His Majesty George the IV.

November 1st.—For nearly twenty miles to the westward of George the Fourth's lake, the country is very bare, there being scarcely a thicket of wood. During this day we forded two rapid rivulets running southwest to St. George's Bay. Deer had hitherto passed us in innumerable straggling herds. But westward of George the Fourth's lake, and particularly as we neared the coast, very few were to be seen. While ascending a mountain, I felt myself suddenly overcome with a kind of delirium, arising I supposed from exhaustion and excessive exertion, but fancied myself stronger than ever I was in my life. It is probable, under that influence, that if the Indian who last joined had not been present, I would have had a rencontre with my other Indian.

PART VIII.

THE WEST COAST.

In the evening (1st November) about eighteen miles west of George the Fourth's lake, from the summit of a snowy ridge which defines the west coast, we were rejoiced to get a view of the expansive ocean and St. George's Harbor. Had this prospect burst upon us in the same manner a month earlier, it would have created in my mind a thousand pleasures, the impression of which I was now too callous to receive; all was now however accomplished, and I hailed the

glance of the sea as home, and as the parent of everything dear. There was scarcely any snow to be seen within several miles of the sea coast, while the mountain range upon which we stood, and the interior in the rear, were covered. This range may be about two thousand feet above the level of the sea, and the snow-capped mountains in the north-east are higher. The descent was now very precipitous and craggy. A rapid river called Flat Bay River, across which we were to ford, or if swollen, to pass over upon a raft, flowed at the foot of the ridge. It threatened rain, and sun was setting; but the sight of the sea urged us onward. By sliding down rill courses, and traversing the steeps, we found ourselves with whole bones, but many bruises, at the bottom, by one o'clock on the following morning. We then, by means of carrying a large stone each on our backs in order to press our feet against the bottom, and steadying ourselves by placing one end of a pole, as with a staff or walking-stick, firmly upon the bottom on the lawn or lee side, to prevent the current from sweeping us away, step after step, succeeded in fording the river, and encamped by a good fire, but supperless, in the forest on the banks of the river.

November 2nd.—Upon the immediate banks of Flat Bay River, there is some good birch, pine, and spruce timber. The soil and shelter are even so good here that the ground spruce (*Taxus Canadensis*) bearing its red berries, constitutes the chief underwood, as in the forests of Canada and Nova Scotia. In the afternoon we reached St. George's harbor. The first houses we reached, two in number, close to the shore, belonged to Indians. They were nailed up, the owners not having yet returned from the interior after their fall's hunting. The houses of the European residents lay on the west side of the harbor, which is here about a mile wide, and near the entrance; but a westerly gale of wind prevented any intercourse across. Having had no food for nearly two days, we ventured to break open the door of one

of the houses,—the captain or chief's, as we understood from my last Indian, and found what we wanted—provisions and cooking utensils. The winter stock of provisions of this provident man, named Emanuel Gontgont, the whole having been provided at the proper seasons, consisted of six barrels of pickled fish, of different kinds, viz: young halibuts and eels, besides dried cod fish, seal oil in bladders, and two barrels of maize or Indian corn flour.

November 3rd.—We were still storm-stayed in the Indian house, in the midst of plenty. It seemed remarkable that the provisions were entirely free from the ravages of rats and other vermin, although left without any precaution to guard against such. There was a potato and turnip field close to the house, with the crops still in the ground, of which we availed ourselves, although now partly injured by frost.

November 4th.—A party of Indians arrived from the interior, male and female, each carrying a load of furs. Our landlord was amongst them. Instead of appearing to notice with displeasure his door broken open and house occupied by strangers, he merely said, upon looking round and my offering an explanation, "Suppose me here, you take all these things."

We crossed the harbor, and were received by the residents—Jersey and English, and their descendants—with open arms. All European and other vessels had left this coast a month before, so that there was no chance of my obtaining a passage to St. John's, or to another country. There were too many risks attending the sending to sea any of the vessels here at this season, although I offered a considerable sum to the owners of any of them that would convey me to Fortune Bay on the south coast, from whence I might obtain a passage to Europe by some of the ships that had probably not yet sailed from the mercantile establishments there.

After a few days I parted with my Indians—the one, who

had with painful constancy accompanied me across the Island, joining his countrymen here to spend the winter with them, and return to his friends at the Bay of Despair in the following spring; the other, having renewed his stock of ammunition and other outfits, returned to his family which we had left in the interior. Having now crossed the Island, I cannot help thinking that my success was in part owing to the smallness of my party. Many together could not so easily have sustained themselves; they would have multiplied the chances of casualties, and thereby of the requisition of the attendance and detention of the able. It is difficult to give an idea of, or to form an estimate equivalent to, the road-distance gone over. The toil and deprivations were such that hired men, or followers of any class, would not have endured them. At St. George's Bay, as at all other parts of Newfoundland except the towns, the country is nearly as destitute of paths and roads as at the time of the discovery of the Island; the intercourse between the settlements, being by water, during bad weather is entirely suspended. I remained at St. George's Bay Harbor under the hospitable roof of Mr. Philip Messervey, the principal inhabitant, to rest and recover from the fatigues and deprivations of my journey, and from a hurt received while descending the mountains to the coast. At St. George's Harbor there are about twenty families, amounting to one hundred souls, most of the parents natives of England and Jersey. Their chief occupation is salmon fishing and furring; a little cod fish is also cured. They catch annually three or four hundred barrels of salmon, according to the success of the fishery, and procure fur, including what is obtained from the Indians by barter, to the value of nearly four hundred pounds. They possess four schooners, three of them being built by themselves and one by the Indians, in which most of the male inhabitants make one voyage annually, either to Halifax, Nova Scotia, or to St. John's, Newfoundland, to dispose of their fish and fur. Some of

them barter their produce with trading vessels from Canada and New Brunswick, or with the vessels of any other country that may come to the coast, receiving provisions and West Indian produce. They all cultivate potatoes, and some keep a few cows. The harbor is six or seven miles in length. On the east side the soil is good; red, white, and blue clays are found here. Along the banks of the several rivers which flow into the harbor, are strips of good land; some good pine spars and birch timber fit for ship building are also to be found there. The young black birch, as far as my observation went, is called here the "witch hazel." St. George's Harbor, although barred, may be entered by vessels of any burthen. There is no other ship harbor between Cape Ray and Port au Port; but there is good anchorage in the roadstead between Cod Roy Island and the main Island near Cape Anguille. None of the other harbors can be entered even by small craft when the wind blows strong westwardly. The trade and pursuits of the inhabitants of the other parts of St. George's Bay, and, it may be observed, of all the other parts of the French Shore, are very similar to those of the other parts of St. George's Harbor. To the southward, at what is called here the Barasways, are seven or eight families, amounting to nearly sixty souls, who catch annually from 150 to 200 barrels salmon, and obtain fur to the value of one hundred pounds. They have one schooner which carries most of their produce to St. John's, Newfoundland, or to Halifax, Nova Scotia; they bartering a part with trading vessels at Cod Roy. At the Great and Little Cod Roy rivers, towards the southern extremity of St. George's Bay, there are twelve or fourteen families, amounting to seventy or eighty souls, who catch annually four or five cwts. of cod fish, about fifty barrels of salmon, and obtain a little fur. The salmon fishery of St. George's Bay, under which head are included, with few exceptions, all the able men, are in summer divided into about thirty fishing crews of two

or three men each, with boats and nets, and occupy the salmon fishery at the shores and rivers all over the bay. At the Bay of Islands, north of St. George's Bay, there are six—and at Bonne Bay, still further north, there are several families; north of that, on the west coast, there are no inhabitants. At the north-east part of the French Shore, between Quirpon Island and Cape John, there are a few stray settlers, whose value cannot be reckoned upon, further than that their occupations are in aid of the French fisheries. Taking an aggregate view of the French Shore, there are resident upon it upwards of fifty British families, consisting of about three hundred souls, who catch annually nearly seven hundred barrels of salmon; fur, to the value of six hundred pounds; cod fish and herrings, four hundred pounds; making, together with the shipping built, the total value of the exports of the British residents on the French Shore, £2,400 or £2,500. The usual mode of paying servants on the west coast is, allowing them one-third of the fruits of their industry, salmon, fur, or otherwise, the employer providing diet. The principle is well worthy of imitation on the east coast. St. George's Harbor, locally called Flat Bay, as well as the estuaries of all the rivers on the west coast, is famous for abundance of eels. The Indians take them in great quantities by spearing in the mud, and pickle them for winter use. If there was a market, they might be, as indeed they have been to a limited extent, exported. The French Shore of Newfoundland is one of the most valuable in the globe for fisheries. At this day it is nearly in a primitive state, although in summer occupied by hundreds of French ships, which send forth their thousands of batteaux and men brought from France, all eager in the pursuit of the cod fishery. Mackerel might be taken at St. George's Bay in any quantity in the fall of the year only, but none are caught now.

This fishery, were it pursued, would succeed that of the salmon in the order of season, and the process of curing is

similar. Herrings might likewise be caught to supply and suit any demand and market, as they are of all sizes. Whale and seal also abound in their respective seasons, but none are killed. The British residents on the French Shore feel very insecure in the enjoyment of their Salmon fishery and in any extension of their property, by reason of the peculiar tenure in regard to the French. A satisfactory solution of the mystery as to their rights has not yet been communicated to them, although they have made repeated applications at head quarters at St. John's. But the French are at present friendly disposed to them, although their rights are treated as a mere sufferance. There is here neither clergyman, school-master, church nor chapel. Yet during my short stay, there was one wedding (an Indian couple, Roman Catholics, married by a Protestant resident, reading the Church of England service from a French translation) and four christenings, celebrated by the same person, with feasts and rejoicings suitable to such events.

November 16th.—Being now much recovered by the various attentions at St. George's Harbor, during my stay of ten days, I set out on foot to the southward along the sea shore, accompanied by two of the young Jersey residents, in hopes, by walking and boating, to reach Fortune Bay, a distance of upwards of two hundred miles, before all the vessels for the season had sailed for Europe. We slept, as intended, in a deserted salmon fisher's hut on the shore, being unable to reach any habitation.

November 17th.—We forded the mouths of several minor streams, and that of the north of third Barasway river, it having no harbor at its estuary. In the evening reached the second Barasway river, a distance of twenty-four miles from St. George's Harbor, and where reside the nearest inhabitants. Our walk all the way was on a sandy rocky beach at the bottom of cliffs washed by the sea. The cliffs are formed chiefly of red sand-stone, red ochre, blue clay, and gypsum, sixty or seventy feet and upwards in height,

with a deep bed of red alluvial earth everywhere superimposed. The gypsum is of the compact kind, with hard nodules throughout; the beds extend into the sea, in which stand water-worn projections, sometimes of grotesque forms. A few miles north of the Barasway river there is a vertical stratum of a dark green-colored rock resembling *verde antique*, running through the gypsum deposit, owing to the great hardness and durability of which its entering resembles a wall running into the sea. Gypsum also abounds inland, at the Rattling Brook, Flat Bay River, &c.

In the immediate vicinity of the Barasway rivers, as well as elsewhere in St. George's Bay, there are both sulphurous and saline springs. One of the former, strongly saturated, occurs near the sea shore about a mile north of the second Barasway river; another is said to exist about seven miles from the sea up the Rattling Brook, which runs into the sea, a short distance north of the second Barasway river. Of the saline springs, one is situated about two miles up the second Barasway, another up the Rattling Brook, and a third is said to be on the neck of land at Port au Port, westward of Fall Mount. Coal of excellent quality lies exposed in strata in the bed and banks of a rivulet between the first and second Barasway rivers, about seven and nine miles from its mouth. The harbor at the mouth of the second Barasway river, as well as that of the first, is barred, having only eight or nine feet of water on the bows at high tides. The vicinity of the Barasway rivers, as of all the river courses in Newfoundland, is an interesting and untrodden field for the geologist, and for the naturalist generally. The inhabitants at the Barasway rivers were now in their winter houses under the shelter of the woods, having recently left their summer residences at the shore. Like the people at St. George's Harbor, they are industrious and frugal; the extent of their salmon fishery and furring has been already noticed. The following animals are entrapped and shot here for their furs:—Martens, foxes, otters, beavers,

musk rats, bears, wolves, and hares. Although ermines are numerous, the inhabitants do not preserve their skins, because they are *small*, their value not being known. Some of the residents have well-stocked farms, the soil being good. Oats, barley, potatoes, hay, &c., are produced in perfection, and even wheat. As evidence of the capabilities of portions of Newfoundland for agricultural purposes, notice must be taken of the farm of my hostess, Mrs. Huilan, at the second Barasway river. The stock on it consisted of six milch cows, besides other cattle; the dairy could not be surpassed in neatness and cleanliness, and the butter and cheese were excellent; the butter made, exclusive of what was kept for her comparatively numerous domestic establishment, was sold, part to the residents at other places in the bay, and part to trading vessels that come to the coast in summer. The cellar was full of potatoes and other vegetables for winter use. She was also an experimental farmer, and exhibited eight different kinds of potatoes, all possessing different qualities to recommend them. Of domestic poultry there was an ample stock. Mrs. Huilan, although not a native, had lived in St. George's Bay upwards of sixty years, and, remembers the celebrated navigator, Cook, when he surveyed the coast. She is indefatigably industrious and useful, and immediately or remotely related to, or connected with, the whole population of the bay, over whom she commands a remarkable degree of maternal influence and respect. The coast southward from hence to Cod Roy, a distance of upwards of thirty miles, and where the nearest inhabitants in that direction were, was too rugged and bold to admit of our walking along the shore. The inhabitants here, or at St. George's Harbor, were ready to exert themselves to get me forward. A forced march, which might occupy ten days, over a snow-covered mountainous country in the rear of the coast, had few attractions just now, and on

November 19th, the weather proving favorable, two young men of Mrs. Huilan's establishment launched forth with me

in a small skiff to row and sail close along the shore, as wind and weather might permit. My kind hostess, aware of the probable detention we might meet, provisioned the little bark for two days.

November 20th, 21st, and 22nd.—While passing in a boat, the formation only of the coast could be viewed, not examined. Between the south Barasway river and Cod Roy the coast is a continued range of cliffs, along which there is neither harbor nor shelter of any kind for even a boat. A light skiff or punt is therefore the safest mode of conveyance along this horrific coast in the inclement season of the year ; for here and there between the cliff there is a spot of beach with a ravine well known to the inhabitants, at which, although far apart in the event of being overtaken by bad weather, a skiff can run ashore, and the crew at the same instant jumping out, haul her up beyond the reach of the surf. This we were forced to do several times, and to clamber to the top of the cliffs until the weather moderated. The cliffs to within three miles north of Cape Anguille are formed chiefly of old, red, and variegated sandstone and sandstone of the coal formation. Then, at a narrow opening called Snake's Bight, another formation succeeds, and from thence southward to Cape Anguille the coast is principally formed of dark bluish stratified rocks, with an inclination of about thirty degrees. Beds of a narrow strata of a red rock, presenting a series of stripes to the sea, alternate. This latter portion of the coast has many irregularities and shiftings in the strata, and single vertical strata of a reddish brown rock, seemingly trap or green-stone, pervade it in different directions, sometimes presenting an extensive smooth mural front to the sea.

November 23rd.—We doubled Cape Anguille and reached Cod Roy. Cape Anguille seems to be formed of quartz rock in front and granite in the rear, it being a projection of the granitic ridge that defines the west coast. Cod Roy—and here there is an island of the same name—is close to

Cape Anguille on the south. The inhabitants, as at the Barrasway rivers, were in their winter houses in the woods, and their boats laid up for the winter. I, however, soon obtained a volunteer in the principal resident, named Parsons, to convey me as soon as the weather would permit in his skiff round Cape Ray, and to the next place where a boat could be procured. Owing to the shelter and anchorage for shipping at Cod Roy, as already noticed, and to its immediate proximity to the fine fishing grounds about Cape Ray, it is the central point of the French fisheries in summer. Many square rigged vessels are here loaded with dried cod fish for France; and hundreds of batteaux brought from France in the fishing ships scatter from hence in all directions over the fishing grounds. There are here five resident families. Gypsum abounds at Cod Roy.

November 28th.—Having awaited at Cod Roy five days in vain for an abatement of the strong north-west wind to permit of our putting to sea in a skiff, I set out with Parsons on foot to the southward by the sea shore. Great Cod Roy River is about six miles south of Cod Roy Island. We crossed the gut or entrance between the sea and the expansive shallow estuary of this river in a boat of one of the residents. The entrance is barred with sand, and has only about six feet of water. There reside here five families with their servants, amounting to twenty-eight souls. They catch about forty barrels of salmon annually, which, with herring, and a trifling cod fishery, are their chief means of subsistence. Coal is found on the south bank of Great Cod Roy River, six or seven miles from the sea. The land between Cod Roy and where the coal occurs is low and flat; so that in the event of the coal being raised, it could be conveyed by means of a railroad from the mines to the shipping. There were at this time ten Indian families encamped for the winter on the banks of Great Cod Roy river, about ten miles from its mouth. The chief attraction for the Indian here is the abundance of eels and trout. Little Cod Roy river

is about six miles south of that of Great Cod Roy, and has also a gut at its estuary, which we in like manner crossed in a boat. Its entrance is likewise barred, and has only three or four feet of water; but forms, like Great Cod Roy river, an expansive harbor inside. There are here two resident families only, amounting to, with servants, seventeen souls. They exist by furring, and a small cod fishery, the quantity of salmon caught being very trifling. Both the Great and Little Cod Roy rivers have their friths protected from the sea by sand hills or downs. The residents of Cod Roy and at these rivers, with the exception of Parsons, and one or two others recently settled there for the sake of the cod fishery, are extremely indolent and ignorant, differing in these respects from the rest of the inhabitants of St. George's Bay. The extent of their salmon and cod fisheries, and of their furring, was noticed when speaking of the occupation collectively of the inhabitants of St. George's Bay. The coast between Cod Roy and Great Cod Roy river is formed chiefly of mural cliffs of horizontally stratified sand-stone of the coal formation, with alternations of red earth, blue clay, and gypsum. From Cod Roy river to Cape Ray it presents downs to the sea. The downs near the sea shore are raised into hillocks, and in the rear they are level. In the vicinity of Cod Roy there are also downs, and here are numerous funnel-shaped hollows, some of them twenty yards wide across the mouth and many yards deep. Most of the hollows are dry; they are caused, as is known to geologists, by fresh water springs dissolving the beds of rock salt and gypsum underneath, and by the earth, sand, and other superimposed substances thus falling in. They sometimes assume the shape of an inverted funnel, having a small aperture only at the surface, and a hole below. Cattle have fallen into the latter description and been lost. The sand composing the downs is of a yellow white color, with minute shells of various kinds and minute radiated brown pyrites abundantly intermixed. They produce only sand-

hill grass, *Carex Arenaria*, and the sea pea or vetch, *Pisum Maritimum*.

The soil in St. George's Bay is the best, and at the same time forms the most extensive tract of good soil any where on the coast of Newfoundland. It is a low flat stripe nearly the whole length of the Bay, lying between the sea shore and the mountains in the rear, interrupted only by Cape Anguille, which juts into the sea. It seldom exceeds two miles in breadth except at the rivers, and there it extends many miles up the country along the banks. The granite mountains behind appear generally clad with firs, except along the summits, which are bare. Iron pyrites of various forms occur in abundance on the west coast, particularly at Port au Port and that neighbourhood. They are generally of the radiated and kidney-shaped structure, encrusted with a white earthy substance. Some of them weigh several pounds, and many of them have garnets embedded. Pure horn-blende rock in large masses, some four or five feet in diameter, is met with at the Cod Roy rivers; coal is reported to exist at other places on this coast, besides being at the Barasway and Cod Roy rivers. The Indians say it lies exposed in such abundance on the surface of the earth near the mouth of a brook on the West side of Port au Port that they have made fires of it on the spot; and this is an excellent harbor for shipping. *Verde antique*, of a dark green color, spotted or mottled with white, is found at the North of Port au Port on the bed of what is called the Coal river, a few miles from the sea, and brought down in pieces by the Indians for the manufacture of tobacco pipes. The natural productions of the west coast, viewed in relation to the neighbouring countries, are well deserving the attention of Canada in particular. Coal and the other valuable minerals are here in abundance, and may be considered at the very threshold of that country by means of steam navigation, to the extension and support of which that material so directly contri-

butes. Iron is probably to be found in more profitable forms than pyrites. By means of steamships, the countries bounding on the Gulf and River St. Lawrence could defy foreign aggression and command an extension of commerce.

November 29th.—Cape Ray.—Having slept the previous night in the winter house of one of the families at Little Cod Roy river, we to-day walked round Cape Ray, here leaving the French Shore and entering upon American Newfoundland, or that division of the coast on which the Americans have a right of fishing and of drying their fish. On the shore north of Cape Ray lay several wrecks of ships and their cargoes of timber. Cape Ray is a low point formed of dusty coloured trap rock, intersected in some places with vertical strata of green trap, running in an east and west direction. The coal formation of St. George's Bay adjoins. On the very Cape there resides during summer a person of the name of Wm. Windsor, with his family. We found him in his winter hut in a spruce wood two or three miles to the eastward of the Cape. The most perfect contentment, cheerfulness, poverty, and hospitality were the characteristics of the monarch of Cape Ray. His resources, through the means of fishing, enabled him to procure a sufficiency of coarse biscuit, molasses, and tea, by which, together with fowling, he supported his family. He wore no covering on his head, even when exposed to the inclement weather—Nature, aided doubtless by habit, providing him with an extraordinary mat of hair, as she does the inferior animals here with fur. The high lands of Cape Ray lie several miles inland, north-east of the Cape, and consist of a group of granite mountains seemingly nearly two thousand feet in height. The scenery among them is sublime; the steep sides of the wedge-shaped valleys appear smooth and striped at a distance, owing to the crumbled rocks and blocks detached by frost being hurled from the very summits to the bottom, where they lie in heaps of ruins. I had reluctantly to behold only the treasures laid open to the mineralogist.

Snow and ice lie in beds on these mountains all the summer. The vicinity of Cape Ray is remarkable for great numbers of foxes, induced here by the abundance of their chief food, viz., the berries of the *vaccinum* or partridge berry and that of the *vaccinium* or hurtle berry. We were several days storm-stayed by winds and snow, and the inefficiency of the ice to bear us across the rivulets, at a boat harbor called the Barasway, six or seven miles east of the Cape. The person in whose winter house we here stopped, his summer residence being at Port au Basque at the eastward, had now entrapped and shot about eighty foxes, black, silver gray, patch, and red, in less than two months; all those colours are produced at one litter. The foxes are mostly caught in iron spring-traps, artfully concealed (not baited) in the pathways along the seashore. It may be noticed that on the west coast of Newfoundland, there is neither Scotchman, Irishman, nor rat to be met with; nor, it is said, has any member of these European families taken up an abode west of Fortune Bay.

PART IX.

AMERICAN PORTION OF NEWFOUNDLAND.

December 5th.—Port au Basque, the nearest harbor to Cape Ray on the East, about twelve miles distant therefrom, we reached by boat from the Barasway. It had a fine open entrance, and good anchorage, and is sufficiently capacious for any number of ships to ride in safety. The rendezvous for fishing vessels, small craft and boats, is a long narrow passage, immediately adjoining the west side of the harbor, formed by a chain of Islands which lie close along the coast, and is called Channel. Four families reside here during the summer, pursuing the cod fishery at that season, and the furring in winter. A small safe basin called Little Bay, with a narrow entrance, adjoins Port au Basque immediately on the East. There are no summer residences here, but two persons engaged in the cod fishery at the Dead Islands

in summer were encamped in the woods for the winter. They undertook to convey me in their little skiff to Dead Island, the next harbor to the east; and in consequence, I here parted with my faithful and daring attendant, Parsons, from Cod Roy.

December 7th.—Dead Island.—Reached this place from Little Bay. The harbor, here called Pass, is fit for any ships, and like Channel, is a narrow passage between a string of Islands and the main Island. Port au Basque and Channel, and the Dead Island or Pass, are both excellent stations at which to carry on the American fisheries. The fishing grounds in the vicinity of Cape Ray are probably the best on the Newfoundland coast for the resort of fishermen from a distance, they being peculiar in this important point, that the cod are always to be found in abundance upon them, and caught at all seasons when the weather is not too boisterous, and then the neighboring harbors mentioned afford shelter to the fishing craft. The fishery may be commenced here six weeks or a month earlier than at any other part of the coast, and continued in the fall of the year until Christmas. Many industrious fishermen within a hundred miles eastward, do not leave these grounds until the end of December. The cod caught in October, November, and December is called winter fish. At Fortune Bay to the eastward, on the same coast, winter fish is caught by means of the smaller boats in the months of January, February, and March, in deep water close to the shores. The winter-caught fish is of a better quality than that taken at any other season. It is allowed to remain in dry salt during the winter, and dried in the first warm weather in spring; being then sent to a foreign market, it arrives at an early season of the year, when there is no other newly-cured fish to compete, and brings fifty per cent. or upwards more than the fish dried in the preceding year. There is no winter fish caught at Newfoundland except at the southwest coast. At the Dead Islands three families reside in

summer, whose chief pursuit is the cod fishery. These Islands are composed chiefly of mica slate. I was here fortunate in finding a very respectable industrious inhabitant, named Thomas Harvey, still occupying his summer house at the shore, and his fishing boat or shallop not yet dismantled for the winter. Although no ordinary remuneration was equivalent to the risk at this inclement season on so dangerous a coast, Harvey unhesitatingly manned and provisioned his boat to enable me to reach Fortune Bay.

It would have been impossible without the probability of being either frozen or starved to walk along this coast at this season of the year, it is so indented with deep bays and rivers, and in a manner uninhabited and unexplored.

December 8th.—We set sail from the Dead Islands, passed by a harbor called Burnt Island, where reside two families who pursue the cod fishery. The weather being stormy, we were forced afterwards to put into the Seal Island, some fifteen miles to the eastward. Seal Island is a fine safe harbor with two entrances, one east, another west. There is one resident family only here, seemingly in good circumstances by means of the cod fishery. The prevailing rock here is mica slate.

December 11th.—Strong winds and snow had compelled us to remain all night at Seal Island. We now got under weigh, with a fair wind, cheerfully passing by Harbor le Cou, uninhabited; Garia, with one resident family in summer; Indian Island, with one resident family; LaPoile, a noble deep bay with two resident families; and reached Grand Bit, a good little harbor with two entrances, the west being the better, and where reside two families in summer, whose habitations were now locked up and deserted.

December 12th.—Set sail, and reached Cingserf, a good harbor for vessels of any size; the best anchorage is on the east side. Within the harbor there are many small inlets. It has no summer residents, nor could we discover any signs of winter occupants. Trap rock prevails here.

December 13th.—Having passed the night at Cingserf, we set off again with a fair wind ; touch at and pass through amongst the Burgeo Islands. Here is a sheltered roadstead with good anchorage. At Burgeo Islands there are eleven or twelve, and in the vicinity, five or six resident families. Burgeo Islands are formed of gray granite, and very barren. The part of the main Island opposite to them, as well as that for some miles westward, presents steep and perpendicular cliffs of old red sandstone to the sea. In the evening we reached the Rameo Islands, the east extremity of that portion of the Newfoundland coast at which the Americans have a right of fishing and of curing fish. There are only two resident families here. The Americans have, by the treaty of Ghent, a right of fishing and curing their fish in common with British subjects, on the coast between Cape Ray and the Rameo Islands, an extent of about seventy-five miles. This portion of the coast, although possessing many fine harbors besides those noticed here, contains scarcely forty resident families, or two hundred and fifty souls on the whole of it. The chief pursuits of these people are the cod fishery in summer, and entrapping foxes and other wild animals for their skins in the fall. The salmon fishery is a very minor object, as the rivers are not so large nor numerous as on the west coast. The fishermen, or planters as they are called, obtain their outfits to enable them to carry on the fisheries from the merchants at Fortune Bay. They annually catch about three thousand cwts. or quintals or upwards of cod fish, make about forty-five tuns cod oil, and obtain fur to the value of one hundred pounds. The approach to many of the fine harbors here is dangerous from the want of surveys of the outer coast. Thousands of valuable lives have been lost by shipwreck, particularly to the eastward of Cape Ray, in consequence of most dangerous currents and sunken rocks that exist here, being unnoticed upon any chart ; and until the colonists themselves take up the cause of humanity, it is not likely these dangers will

for a long time be made known or a light-house erected on the coast. The residents here, as at St. George's Bay, and at most of the north and west harbors of the Island, have both summer and winter houses. They retire to the residences or huts in the woods on the setting in of the winter, for facility of firewood and shelter; the labor attending the conveyance of fuel to their summer residences at the shore, which are exposed to every inclemency of the weather, being very great. They sometimes remove to a distance of thirty miles and even farther to the sequestered woods at the heads of bays and harbors, and on the banks of rivers, taking with them their boats, furniture, and provisions, and re-appear at the coast in the month of April. The habits and imperative performances of the beaver for preservation of self and kind, are at least equally perfect with those of the European settlers or Indians on the coast. Each have their summer and winter abodes, and respectively provide for their retirement, &c. Sea fowl and birds of passage resort to the south-west coast in great numbers in the fall of the year; and during that season, as well as in winter, constitute a considerable portion of the provisions of the inhabitants. The dogs here are admirably trained as retrievers in fowling, and are otherwise useful. The smooth or short-haired dog is preferred, because in frosty weather the long-haired kind become encumbered with ice upon coming out of the water. They are fed on fish, purposely cured for them. The *Loup Cervier*, a common animal in all the adjacent countries, is not considered to be a native of Newfoundland, although one was caught last year in LaPoile Bay, and another killed in the same neighbourhood a few years ago. In these instances it is probable that the animals have either crossed or been blown over upon the ice from some of the neighbouring countries. Neither squirrel, porcupine, or racoon have been met with on the Island. Penguins were once numerous at this coast, their breeding place having been the Penguin Islands, about

fifteen miles north-east from Rameo Islands. They have been extirpated by man, none having been seen for some years past. Halibuts abound more at the south-west coast than elsewhere. The young, in the fall, is one of the finest fishes on these coasts; but its excellence seems to be little known except to the fishermen and their families. It may be cured in several ways.

PART X.

SOUTH COAST OF NEWFOUNDLAND—TERMINATION OF JOURNEY.

December 14th.—The coast was now every where clad in its white winter mantle, and most of the birds of passage had left the shores for a more genial climate. Having spent the night at the Rameo Islands, we set sail eastward, entering now upon the British Newfoundland coast. This part may be considered out of the province of the present narrative, although, except to the immediate residents, little better known than the coast just gone over. The coast at the entrances of White Bear Bay and Old Man's Bay is formed of trap rocks and red sandstone alternating. Pass by Little River, a good harbor; Cape La Hune, where two families reside; Bay Francois, with three resident families; New Harbor, three resident families; Rencontre, four families; and reach Richard's Harbor, where several families reside in summer.

Cape La Hune, as well as the coast thence to Richard's Harbor, is formed chiefly of trap rock. Richard's Harbor is a complete basin, surrounded on all sides by steep trap hills, of four hundred feet and upwards in height. The entrance is very narrow and deep, rocks on the west side overhanging to that degree as to render it awful to behold while passing under.

December 16th.—Having been wind-bound one day in Richard's Harbor, a favouring breeze now carries us to the Bay of Despair, and in sight of the whaling and cod fishery establishment of Messrs. Newman, Hunt & Co., of London. The few inhabitants, and their pursuits, between Rameo

and the Bay of Despair, are similar to those farther to the westward. The rock formation of the coast between Cape Ray and the Bay of Despair may be noticed in a general view as follows: red sandstone, of the coal formation, is found next to the trap rock, six or eight miles east of Cape Ray. Then we come to primitive rocks, mica slate, gneis, and granite; next are trap and old red sandstone alternating, which, with the granitic rocks, form the coast all the way eastward, presenting little else than most barren and precipitous hills, half clad with stunted firs, and indented every where with harbors, bays, and rivers. Few of the harbors have any soil at those parts nearest the sea, there being merely debris in small patches. At the head, however, of most of the harbors and bays, and along the margins of the waters that discharge into them, some good soil and spruce timber are to be found. Rock crystals of different colours are stated by the inhabitants to occur in quantities at Harbor le Cou and Diamond Cove in that neighbourhood. Several of the inhabitants possessed transparent specimens as curiosities.

Upon reaching the establishment of Messrs. Newman & Co., at the Bay of Despair, I learnt with satisfaction that the last ship for England this season from this coast was to sail within a few days from another of their establishments in Fortune Bay. Harvey's boat and men now went back to the Dead Islands, but not without apprehension on my part for their safety, contending against westerly winds on this inhospitable coast at such a season. For while we were coming, with a fair wind, every drop of water and spray that came into our boat congealed as it fell, thus binding together boat, ropes and sails in one mass of ice.

Here ended a four months' excursion of toil, pleasure, pain, and anxiety, succeeded by the delight of being again restored to society, which was enjoyed with the gentlemen and families of the mercantile establishments at the Bay of Despair and Fortune Bay.

It was impossible to reach St. John's, and I took passage at Little Bay, in Fortune, by the ship "Duck," sailing on the 28th December, and arrived in Dartmouth, in England, on the 10th February, 1823.

REGISTER OF THE WEATHER IN THE INTERIOR FROM 4TH SEPTEMBER TO 31ST OCTOBER, 1822.

	Winds.	Bright days	Rainy days	Foggy and drizzly days	Snowy days
September } 4th to 30th inclusive. }	W. & S. W.	19	3		
	N. W.	1	1		
	S.	2	1		
		22	5		
October, } 31 days. }	W & S W	9	1	2	1
	N W	3			2
	N	2			1
	S	2	2		
	S E	2			1
	E			2	
Sept., as above Weather of 58 days.	N E	1			
		19	3	4	5
		22	5		
		41	8	4	5

W. E. CORMACK.

Remarks on part of the Western Shore of this Island,

BY THE SURVEYOR GENERAL, HON. JOSEPH NOAD, AFTER
PERSONAL EXAMINATION IN 1847.

That portion of the western shore of the Island to which the following observations are intended to apply, is situate within that extent distinguished as the "French Shore," and reaches from the Great Cod Roy River in latitude 47°50 north to the Bay of Islands in 49°15 North. The whole of the country included in this space, as seen from seaward, presents a very different aspect from the southern and eastern shores. The latter exhibits to the eye, on approaching it, nothing but a low stunted growth of fir or spruce ; the former appears clothed to the water's edge with a thick growth of the various kinds of hardwood ; and the land generally, in its most prominent features, resembles that on the adjacent Island of Cape Breton.

The places especially examined by the Surveyor General, who had the honor in the month of July, 1847, of accompanying His Excellency the Governor on a cruise to the western and southern shores of the Island, were the following :—

GREAT COD ROY RIVER.

The entrance to this river is over a sandy bottom, and is narrowed from the projection of a sand-bank on the northern side to a distance not more than two hundred feet.

It is not navigable for large vessels, but small craft of about thirty tons burthen can easily follow the channel and safely transport their cargoes from the chief salmon fishing establishment to the sea, a distance of nine or ten miles. After passing the entrance to this river, it opens at once to

a sheet of water more than a mile broad, and this width it preserves, running south-easterly, at least ten miles, continuing afterwards in a narrow stream to penetrate the country several miles further. On its southern side the land rises in an easy ascent to an elevation of from one to two hundred feet above the level of the sea, maintaining at that height a gently undulating surface, and stretches away to the southward until it meets the Little Cod Roy river, a stream running nearly parallel with and distant from it about seven miles. On its northern side the land has a higher range, and at a distance of about three miles from the shores of the river attains an elevation of five or six hundred feet. Between this ridge and the Cod Roy another stream runs, which empties itself into the main river near the bar. The extent of land lying between the Great and Little Cod Roy, and on the north side of the former, may, from the examination made, be estimated to contain an area equal to seventy thousand acres. The whole of that space consists of a rich loam, capable of the highest degree of cultivation, and fit for the production of any description of crop. A small quantity of wheat has been sown by a Scotch farmer on the natural soil, and it was seen growing luxuriantly. Limestone is readily obtained, and can, with but little trouble, be made to contribute to the support of the land where it is so abundantly found. Timber of the most serviceable description covers, for the most part, the tract here referred to; birch trees measuring from five to seven feet in circumference, were found within less than a quarter of a mile of the shore, while others of a larger growth may be readily procured at a short increased distance from it. Amongst the birch is mingled spruce and fir, and all of sizes suitable either for the erection of houses or the construction of vessels. The few settlers found here profitably employ some part of their time in cutting and carrying to our settlements on the southern shores materials for the latter purpose. From information obtained at Cod Roy, but little doubt exists that coal may be

procured, and that without much difficulty, towards the eastern end of the river.

Lying to the northward of the valuable tract of land above referred to, is found a range of hilly ground admirably adapted for grazing; its natural production consisting of a herbage, which early in the summer attains a height of between two and three feet. The whole of the population on and near the Cod Roy river does not exceed 12 or 14 families; the majority of these employ themselves in the prosecution of a limited salmon and cod fishery, and only in a very partial manner turn their attention to the cultivation of the ground; neither do they derive that benefit, even from its natural productions, which they may easily do. Hence, where several of these persons may, with a little preparatory trouble, cut from one to two hundred tons of fodder, they content themselves with gathering in about fifty.

Indeed, with so scanty a population as that now inhabiting the Cod Roy, none of its resources can be sufficiently developed; hence, while under other circumstances a winter fishery may be profitably conducted off Port-au-Basque, a place within 15 miles of Cod Roy, by the residents at the latter place, such a branch of trade is at present not thought of. The few settlers before referred to complain with much feeling of the indignities they suffer at the hands of the French—their nets being, as they allege, sometimes forcibly taken from them and carried away by the French men-of-war on the station.

In closing the remarks on this river it is doing no more than justice to say, that it would be difficult to imagine a more beautiful or picturesque scene than the whole presents; and whether with reference to the soil around it—to its fisheries—or its geographical position, forming as it does part of the Northern Head, and therefore commanding the entrance to the Gulf of St. Lawrence—a more desirable or important place for a settlement could scarcely be found.

Cod Roy is about 300 miles from Halifax, and not more than double that distance from Quebec, and is nearly in the same latitude with the latter place.

BAY OF ST. GEORGE.

This Bay (the northern head of which is about 40 miles from Cod Roy) is large and beautiful. On either side the land rises not to a mountainous height, but to an elevation of easy access, and offering no obstruction to its being appropriated to useful purposes. At its entrance it is about forty miles broad, and Flat Point, where the largest settlement has been established, is about the same distance from its northern head.

The land in this Bay and adjacent to it is of a totally different character to that on the southern and eastern shores of the Island. In the latter the soil rests on a slaty formation, and in clearing ground the agriculturist encounters large quantities of stones, the removal of which from the surface is indispensable, and can only be accomplished by much hard labor and consequent expense. In the former, no difficulty of this nature presents itself; there the soil is rich and deep, and when the trees and stumps are removed from it, no further obstacles exist to prevent the land being at once brought under the plough; while the husbandman has at hand limestone and gypsum sufficient for the most extensive farming operations, and in addition to which, kelp, a most valuable manure, may be collected almost to any extent. To clear land near St. John's, and generally on the eastern shore, so as to fit it for the reception of a crop, costs from £4 to £15 per acre; to put an equal quantity of ground in a similar state either at Cod Roy or Bay St. George would not involve an outlay beyond 40s. or 50s.

The number of persons who may be settled on the shores of this Bay, and secure to themselves a comfortable maintenance, it would be almost impossible to estimate correctly; but having reference to its valuable fisheries, which, as

yet, have only been partially developed, and also to the great extent of cultivable land around and near it, the Bay of St. George would appear capable of supporting from one to two hundred thousand persons. The inhabitants at present occupying it consist in the whole of about eight hundred people, who reside for the most part on Flat Point, a place selected for settlement solely on account of its situation with reference to the fishery, and consists of a few acres of a sandy point, but little above the level of the sea.

The whole of the residents in this Bay, or with very few exceptions, occupy themselves chiefly in the prosecution of the herring fishery, which, commencing in the latter end of May or beginning of June, continues for a period varying from three to five weeks. During this season, herrings of a very large kind abound in vast quantities, and the number taken is in proportion to the hands employed, and not to the quantity of fish. This year about twenty thousand barrels were taken, and which perhaps may be considered as an average annual catch. The export of fish is chiefly to Quebec, whence bread, flour, and other articles of provisions are brought in return; the supplies from St. John's to this Bay being to a very limited amount. When the herring fishery terminates the attention of the people is turned to catching salmon, in which they are generally successful. No preparation is made here for the prosecution of the cod fishery, but that this branch of trade may be successfully conducted is proved by the fact that several large boats came this year from Cape Ray, fished on the southern side of the Bay, and in a short time returned with their boats laden, having caught on an average eighty quintals each boat. Near the northern head of this Bay a small Island, known as "Red Island," is situate, and here a cod fishery to some extent is carried on by the French in small flat-bottomed boats, which are hauled up every night on the Island; and in this way about eight thousand quintals of cod fish are taken annually. That a valuable and extensive cod

fishery, therefore, may be here established there can be no doubt, and which may extend from Cape Ray to Bonne Bay, a distance of about 120 miles. In addition to this fact it may be mentioned that Bay St. George, in common with other places around our shores, participates in the benefit derived from the annual visitation of the caplin; but in addition to this it has the great advantage of having that delicate fish, the smelt, within its boundaries, and these can be and are taken during each month in the year. During the past winter, when the scarcity of provisions was so generally felt in the island, the distress of the residents in this bay was greatly alleviated by the supply of this description of fish.

Within a short distance of the southern shore of this bay coal has been long known to exist, and on the northern, near Port au Port, it is almost equally certain that valuable mineral may also be found—specimens having been brought from that place.

THE BAY OF ISLANDS AND RIVER HUMBER.

The Bay of Islands (distant from the north head of the Bay St. George about 50 miles) is spacious and easy of access, surrounded by a range of hills which stand out in bold outline of from 800 to 1000 feet high, and having its entrance, of nearly fifteen miles wide, studded with lofty Islands. This bay offers protection to vessels within it, and on its southern side affords a good and safe anchorage. In depth it is equal to its width. From its eastern side proceeds several valuable arms, but the most important, and that specially examined and known as the Humber River, extends from the south-east part of the bay about twenty-eight miles easterly into the country, maintaining throughout that distance a width of more than two miles, and terminating that width at a place distinguished as the Sound, whence the Humber proceeds in a narrowed channel.

The high lands around the Bay, on approaching the Humber, gradually lessen the abruptness of their character

until, on the banks of that magnificent river, they do not rise higher than from three to five hundred feet, and present to the eye a rich clothing of all the varied foliage found in the colonies near us, and which reaches to the water's edge.

The soil, throughout the extent named, is well adapted for all the purposes of cultivation—it is deep and fertile—and possesses within its bosom the means of its own support, as limestone, here as well as at Cod Roy and Bay St. George, can be readily procured, and to any extent. The hardwood found here consists chiefly of the different descriptions of birch—the yellow, (called wych-hazel,) within less than a quarter of a mile of the shore, was found measuring, at six feet from the ground, from five to seven feet in circumference; and soft wood, as pine, spruce, larch, &c., is to be had with as little difficulty, the whole existing of a size sufficiently large for any kind of building, and in quantities abundant enough to become an article of export. Throughout the whole extent of the broad part of the Humber, and which reaches, as before stated, from the Bay of Islands to the Sound, the navigation is free and safe to the largest class of vessels, and the anchorage general and good. From the Sound the Humber extends easterly, in a stream reduced in its width to about one hundred yards, twelve miles to a sheet of water known as the Deer's Pond. In the narrow part of the Humber, just referred to, there are two rapids—one situate about a mile and a half from the Sound, and the other about three miles from the Deer's Pond—the first named of these can be easily passed at high spring tides, and the second presents no difficulty that two men with a boat may not readily overcome—one man to track, and another to keep the boat from the shore, being found sufficient to ensure a safe passage over it. The Deer's Pond, which has been before named, is about fifteen miles long and three broad, and is surrounded by land of a most fertile description, and bearing on its surface pines, measuring from three to four feet in diameter, with birch of scarcely infer-

ior dimensions, and both these kinds existing in great quantities, and with such water power within reach as would seem to invite the establishment of saw mills, and at the same time to ensure success to such an enterprise. The rapids before adverted to would offer but a slight impediment to the safe transit of rafts of lumber or baulk from the Pond to the Humber, and which may be conveyed between those places in the length of a summer's day.

From the Deer's Pond to the Grand Lake is an estimated distance of fourteen miles, nearly the half of which can be passed in a boat on the stream which communicates between those places. The lake just referred to is the most extensive sheet of water yet discovered in Newfoundland, in length it is represented to be about 50 miles, and in breadth 4 or 5 miles; its south-western extremity reaching within 16 miles of the harbor of Bay St. George, and its north-western approaching White Bay, within from 30 to 40 miles. Thus, from the Bay of Islands, a communication may readily be opened which, passing through the Humber, Deer's Pond, and Grand Lake, would enter the Bay of St. George by a road of about sixteen miles in length.

From the Grand Lake, too, it would be no difficult undertaking to penetrate through the country to the Bay of Notre Dame, on the Eastern side of the Island, or to the Bay of Exploits. The Indians now occasionally take that route, accomplishing the distance in three or four days.

The settlements at present established on the Humber are very limited and of an unimportant character; at none of these are there more than two families, and the whole of the population to be found at present on the banks of this most important river does not exceed a hundred persons.

The area of good cultivable land to be found on its banks and adjacent to it, it would be difficult to estimate, unless a more extended examination were made than has yet taken place, but from the resources which this part of our Island possesses, in its herring, salmon, and cod fishery, coupled

with the great extent of land, which only requires the ordinary care of the agriculturist to ensure a profitable return, it may not be extravagant to say that from a hundred to two hundred and fifty thousand persons could be readily located there, and who would be placed in such circumstances and surrounded with such resources as would guarantee to the sober and industrious settler a comfortable maintenance.

At none of the places mentioned in the foregoing observations is any magistrate established or person exercising magisterial functions; and although crimes of a flagrant character are happily of rare occurrence among them, yet it not unfrequently happens that the hand of the law is necessary to secure to the weak the peaceable enjoyment of his property.

At present the only opportunity which the population in the several places named have of protecting themselves from the aggressions of their more powerful neighbours, or of seeking redress for injuries sustained, is by applying to the Naval Officer in command of a man-of-war, sent around our shores annually for the protection of the fisheries, and to whom a commission of the peace is usually given.

To persons visiting the western shores of Newfoundland, after having been acquainted with the Southern and Eastern, the difference of climate between those places, and the different effects produced upon the weather by the winds, become at once most apparent. The Southern shore is frequently enveloped in fog—and the Eastern, although not subject to that visitation to an equal extent, as the bank of fog more generally keeps at some distance from it, yet does an easterly wind almost always bring to the eastern shore cold and disagreeable weather. On the Western shore fog is rarely seen, and the climate is an ameliorated one.

During the time employed in the examination of the places referred to, when in St. John's it was so cold in consequence of a strong easterly wind as almost to check vegetation, in the Bay of St. George, where the wind blew from the same

quarter and on the same day, the weather was that of summer.

In concluding these remarks it may not be superfluous to observe that the entrance to the Gulf of St. Lawrence is formed on the one side by the northern part of Cape Breton and St. Paul's Island adjacent thereto, and on the other by the South-western part of Newfoundland—the distance between the headlands here referred to being, as before stated, about 56 miles. The land on both sides, when entering the Gulf, is distinctly seen, and rising high out of the water.

The several places enumerated in the foregoing observations would appear to be of no slight political importance, when it is borne in mind that the whole are situate near the Gulf of St. Lawrence, and one of them, as before stated, forms part of the Northern head at its entrance. The settlement then, of the Great Cod Roy, Bay St. George, and Bay of Islands, with the Humber, would appear to be desirable not only on account of the goodness of the soil and of the valuable fisheries connected with them, but that also, from their geographical position, their occupancy and permanent settlement would seem a measure of some national importance.

(TO THE EDITOR OF THE "PUBLIC LEDGER.")

SIR,

I have noticed in the *Canadian News*, of August 10th, some extracts from a communication by a gentleman of St. John's to a New York paper, on explorations in Newfoundland, in which reference is made to "*one Cormack*," in connection with the early exploration of the interior of the Island. Having enjoyed the privilege of Mr. Cormack's intimate friendship for many years I have thought it due to his memory to forward to you, herewith, for publication in your columns, if you deem it proper, a biographical sketch of his life, which appeared in the *British Columbian* of May 9th, 1868,—a paper then published at New Westminster,—the closing scene of Mr. Cormack's life and labors. If the publication of the sketch should tend to render the name and history of my dear old friend more familiar to the people of the place of his nativity than it would appear to be, my purpose shall have been gained.

I am Sir,

Yours obediently,

EDWARD GRAHAM.

Victoria, British Columbia, }
 Sept. 20th, 1871. }

DEATH OF W. E. CORMACK.

It was our very melancholy duty to announce in our obituary this day week a name intimately associated with almost every social and political movement, that has taken place in this Colony, ever since its birth, ten years ago—the name of William Eppes Cormack.

Mr. Cormack was born at St. John's, Newfoundland, on the 5th of May, 1796. About seven years thereafter, on the

death of his father, the family returned to Scotland, in which country Mr. Cormack spent his school-boy and most impressionable days. Endowed with a fine susceptibility of the beautiful in external nature, it seemed to afford him great delight to recount his boyish rambles amidst the pleasing and classic scenery of Southern Scotland. During one of his holiday excursions he visited Burns's "Bonnie Jean," nothing very remarkable, perhaps, in the light of our prosaic time, but it formed a green spot in his memory which often blossomed into facetious pleasantry at congenial gatherings. He attended the Universities of Glasgow and Edinburgh; the subsequent fame of several of his class-fellows at the former (the late Marquis of Breadalbane being one) was always, with him, a theme of much admiration and pride; the emotion—possibly from mere associative ideal force—occasionally rose into an impassioned love of his ancestral country. At Edinburgh he was fortunate enough to secure the personal friendship of Professor Jameson, the late celebrated Mineralogist, whose fascinating incitement to the study of the physical sciences he ever gratefully remembered.

About the year 1818 he took out from Scotland to Prince Edward's Island two vessels, with emigrant farmers, and established there the now flourishing settlement of New Glasgow. About a dozen years thereafter he established an export trade of grain from the same Island to Great Britain, which we understand has increased immensely.

In or about the year 1821 or 1822, he crossed the interior of Newfoundland, being the first European who had done so. The object being (1) to test the truth of certain fabulous-like statements regarding the occupation of the interior by a peculiar race of Indians, and (2) their existence being proved, to introduce them to civilized life. A notice of this exploration appeared in the *Edinburgh New Philosophical Journal*, [circa 1828]. Between the years 1819 and 1834 he added a good deal to the knowledge of the flora of North

America, frequently sending home to the Linnean Society specimens of plants : a specimen of the *Calluna Vulgaris*, or common heath, contributed by Mr. Cormack, formed, not very long ago, an interesting subject of discussion in the Society, the question being : Whether the *Calluna* is indigenous to the American Continent? Some time within the period last above stated, he wrote an Essay on the British American and French Fisheries, for which he received a medal from the Montreal Natural History Society. He went to Australia in 1836, where he cultivated tobacco, with much success, for two or three years. He left that colony for New Zealand in 1839, and there laid the foundation of pastoral pursuits on an extensive scale by purchasing land from the natives and raising cattle and horses. But some difficulties occurred with the Home Government which materially interfered with the enterprises of the first settlers in that Island. While in New Zealand he exported spars (the Cowdie Pine) to London, on an extensive scale, principally for the Admiralty. He sent a numerous collection of the young forest tree seed of New Zealand to Kew Gardens, but seemed to be under the impression that some mishap had befallen them. He spent a few years in California engaged principally in mercantile and mining pursuits, varying their exciting though arid pleasures by forming a small *hortus siccus* of the magnificent plants of that State. In this Colony he took a most active part in everything which he thought would tend to its material and political progression ; he fought hard to get the modicum of representative government which we now possess—the peculiar beauties of which some of us, perhaps, have latterly been unable to perceive. One of the first members of our Municipal Council, he devoted to its affairs, in an ultra-disinterested way, a great deal of valuable time. He was mainly instrumental in establishing an Agricultural Society in British Columbia, acting as its Secretary, and preserving—uninfluenced by much that was disheartening—its rather languid life. He

had charge of the Ichthyological Department in connection with British Columbia's contributions to the Exhibition of 1862, (a very interesting account of the various kinds of salmon, &c., found in the Fraser accompanied the contributions,) but nothing was ever heard of the fishes, the probability being that they did not keep through the tropics. The stomachs were not taken out, and this would certainly serve to hasten decomposition; the object in retaining the stomach, and mutilating the fish as little as possible, was a purely scientific one. The examination (by such a man as Professor Owen) of the contents of the stomach might have thrown some valuable light not only on ichthyology but on some of its allied sciences. He opened a correspondence a few years since with the Highland and Agricultural Society of Scotland, and sent to it a variety of the grass seeds of this Colony, thinking the bunch grass, for instance, would find a congenial habitat in the Alpine districts of Scotland. By the last mail he contributed to the same Society a sample of a species of hemp indigenous to British Columbia, and was recently engaged in trying to procure one or two of our mountain sheep, with the view to improve the breed and wool of Great Britain. These animals, however, are not unknown in the Mother Country—good specimens are to be seen in the London and Edinburgh Museums; and, if we remember rightly, a description of them is given in Richardson's *Fauna Boreali Americana*.

Mr. Cormack was a great lover of field sports and outdoor amusements. Fishing and skating he was passionately fond of. During one of his occasional visits home he amused himself by revising and amplifying a small treatise on skating (originally written by a Lieut. Jones); and the old gentleman agreeably delighted and astonished everybody here, in 1862, by his graceful evolutions on the ice. He numbered amongst his friends and correspondents some of the most celebrated scientific and literary men of the last half century, such as Sir William Hooker, Professor Faraday,

Dr. Ure, Dr. Hodgkin, (Chairman of the Aborigines Protection Society,) and the late talented, though some what eccentric, John Macgregor, author of the "Progress of America," "Commercial Statistics," &c., the last being a most intimate friend. Though fond of writing, Mr. Cormack has left no works to testify to his industry. It is only visible through the darkened light of half-forgotten newspapers and Reviews.

The impulsion of a strong fancy made him a wanderer—the commercial man and the explorer in one. While he sought the respectable gains of commerce, he at the same time aimed at extending international knowledge, thus contributing to the welfare and happiness of man.

He was naturally of a buoyant and happy disposition, genial and kindly; his manners were suave and dignified. Latterly great bodily suffering somewhat tinged with bitterness a temper which was constitutionally mild. But no words of his were meant to be "unkind," though they were sometimes, by those who did not understand him, "wrongly taken." His warm appreciation of what he deemed the good works of the Roman Catholic Missionaries in this Colony showed that he had no narrow-souled religious notions. The Rev. Father Fouquet he held in the highest esteem.

Though afflicted for years, he was only confined to bed about a month. His sufferings during the greater part of his confinement, though intense, never affected his mental powers. With a clear intellect and a consolatory resignation he met the approach of death.

The greatest respect was paid by this community to his remains—almost every one who could conveniently attend was at his funeral. The Fire Department (of which he was an honorary member) paid him special respect, the officers of the company carrying his body to the church. The funeral services were conducted by his estimable friend the Rector of Holy Trinity. Personally we have to mourn the

loss of an esteemed and much valued friend. Several of our "old familiar faces" are, unhappily, leaving for other homes—but one dear old face has passed away to "another and a better world."